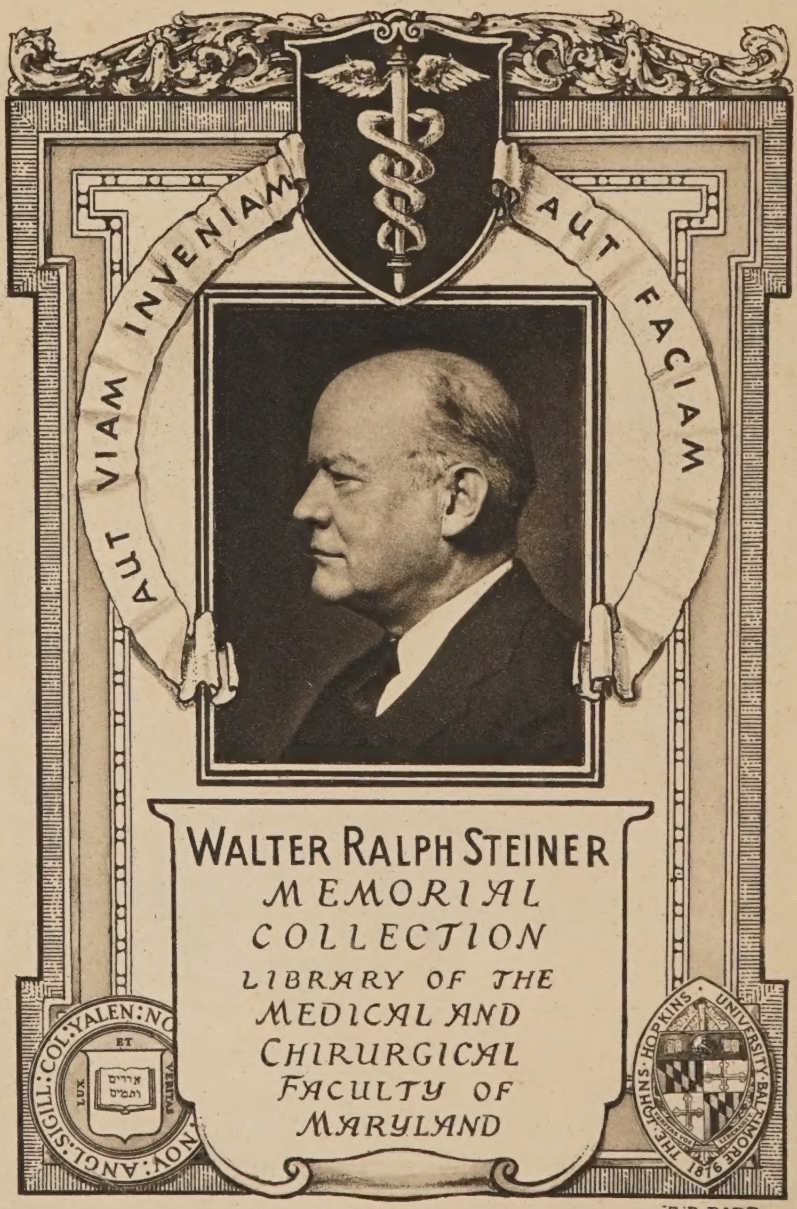
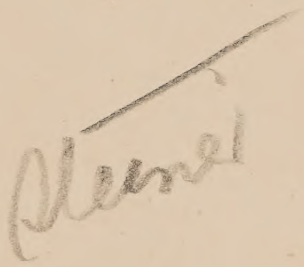


22501371100

F3573-174

8-
1st Edition



MEDICAL HERESIES:

HISTORICALLY CONSIDERED.

A SERIES OF CRITICAL ESSAYS ON THE ORIGIN AND

EVOLUTION OF SECTARIAN MEDICINE,

EMBRACING A

Special Sketch and Review of Homœopathy,

PAST AND PRESENT.

Medical and Chirurgical
LIBRARY
Faculty of Maryland

BY

GONZALVO C. SMYTHE, A.M., M.D.,

PROFESSOR OF THE PRACTICE OF MEDICINE, CENTRAL COLLEGE OF PHYSICIANS AND SURGEONS, INDIANAPOLIS; MEMBER OF AMERICAN MEDICAL ASSOCIATION, &C.

PHILADELPHIA:
PRESLEY BLAKISTON,
1012 WALNUT STREET.
1880.

A6
5m9
1880

Wellcome Library
for the History
and Understanding
of Medicine

Entered, according to Act of Congress, in the year 1880, by
PRESLEY BLAKISTON,
In the Office of the Librarian of Congress, at Washington, D. C.

WELLCOME
LIBRARY
General Collections
M
496

57434

Press of WM. F. FELL & CO.,
1220-1224 Sansom St., Phila.

CONTENTS.

CHAPTER I.

PAGE

Ages in Medicine; The Mythological, Dogmatic or Empirical and Rational; Origin of Medicine; Its Evolution; Primeval Medicine; Ancient Egyptian Civilization; Influence of Epidemics upon Primeval Man 17–22

CHAPTER II.

Egyptian Mythology, Isis, Osiris, Horus, Thoth, Apis, Esmion and Serapis; Diseases Attributed to the Anger of the Gods; Priests; Demonology; Egyptian Mysteries; Venesection; Clysters; Greek Colonies; Æsculapius; Chiron the Centaur; Machoan and Podalirius; The Asclepiadæ; Pythagoras and his School; Secret Nostrums..... 23–30

CHAPTER III.

The Genealogy, Writings and Opinions of Hippocrates... 31–34

CHAPTER IV.

The Dogmatic School of Medicine; Prominent Characters in this School; School at Alexandria, 32 B.C.; Herophilus; Erasistratus; Dissection of the Human Body Legalized for the First Time in the History of the World; Empiric School, 287 B.C.; Pyrrho; Philinus; Serapion; Doctrines and Influence of this School; Methodic School; Asclepiades; Stephanus; Marcus Artorius; Themison; Principles and Influence of this School..... 35–42

CHAPTER V.

Claudius Galen; Biography; Education; Distracted Condition of Medicine; Opportunities for Distinction; Revival and Revision of Dogmatism; His Writings and Opinions; The Impression They left upon the Medical World; His Cowardice..... 43–50

CHAPTER VI.

Doctrines and Influence of the Christian Church on the Progress of Medicine; Priestcraft; Prayers; Incantations; Holy Waters, Ointments, etc., etc.; Ignorance and Superstition; Reign of Justinian; Destruction of the School at Athens; The Nestorians; School at Edessa; Baghdad; Preservation of Medicine by the Arabians; Schools in Spain; Rhazes; Hali Abbas; Avicenna; Albucasis; Improvements Introduced by the Arabians..... PAGE 51–57

CHAPTER VII.

Progress of Medicine in the West; Destruction of Roman Empire; Ecclesiastics; Oribasius; Ætius; Alexander of Tralles; Paulus Ægineta; Attempted Revival of Letters during the Reign of Charlemagne; Theosophy and Astrology; Schools at Monte Cassino and Salerno; Cures by Prayer; Revival of Practical Anatomy by Mondini, 1315 A. D.; Important Events During the Century; Cabalistic Medicine; Cornelius Agrippa; Jerome Cardan; Paracelsus; Chemical School of Medicine; Doctrines of, and their Influence..... 58–68

CHAPTER VIII.

The Rosicrucians; Mystery connected with the Origin of this Sect; Their Absurd Pretensions; The Eclectic Conciliators; Belief in Witchcraft; Transmutation of Metals; Demonology, etc.; Mathematical School; Borelli; Principles of this School; Bellini; Unrealized Expectations of this School..... 69–72

CHAPTER IX.

Brilliant Progress of Surgery; Evolution of Anatomy; Knowledge of the Ancients upon this Subject; Cannibalism; Knowledge Gained by Embalming; Prejudices against Dissections by the Jews, Greeks, Early Christians, etc.; Roman Laws upon the Subject; Rufus, the Ephesian; Galen; Mondini's Work on Anatomy; Carpi; Silvius; Michael Servetus; Andrew Vesalius; Harvey; Progress of Medicine and the Collateral Sciences during the remainder of the Century..... 73–82

CHAPTER X.

Progress of Medicine during the Close of the Seventeenth Century and the First Half of the Eighteenth; New

PAGE

Schools Founded upon the Improvements in Physiology During this Period; Expectant School; Ernest Stahl; Principles of this School; Hoffmann's System; Boerhaave; Cullen's System; The Brunonian System; The Last of the Dogmatic Schools... 83–89

CHAPTER XI.

Concluding Remarks on Ancient Dogmatism; Medicine and Philosophy; Materia Medica of the Ancients..... 90–95

CHAPTER XII.

Homœopathy as Taught by Hahnemann; Biography of Hahnemann; Similia Similibus Curantur; Transcendental Pathology; Quotations from Organon; Spirit-like, Dynamic Pathology; Dilutions, Manufacture and Strength of; Olfaction; Single Dose; Disease Canceled by Removing Totality of Symptoms; Vital Force, Rude and Instinctive; Efforts of Nature the Disease itself; Local Remedies Denounced; Hahnemann's Theory of Chronic Diseases; Three Miasms, Syphilis, Sycosis and Psora..... 96–123

CHAPTER XIII.

Homœopathy Continued; Forces of Nature; Opinion of the Ancients upon this Subject; Unity of Force; Nature of the Vital Forces; Sensation and Motion; Electric Force; Impossibility of Diseased Vital Force; Dynamic Causes of Disease; Material Causes; Hahnemann's Theory of Psora as a Cause; Allopathy, Homœopathy and Antipathy; Law of Similars Based upon Symptoms and not Pathology; Claimed as a Divine Revelation; Explanation of the Modus Operandi of Cure under this Law..... 124–138

CHAPTER XIV.

Discussion of Homœpathy Continued; Provings; Difficulties Attending this Process; Dynamic Force Acquired by Dilution and Trituration; Provings of Calcarea; Allen's Encyclopædia of Materia Medica; Dynamization; Hahnemann's New Chemical Law; Divisibility of Metals; Mathematical Calculations in Regard to Dilutions; Modus Operandi of Medicines; Effect of Medicine upon the Temperature of the Human Body; Antipyretic Treatment of Fevers..... 139–158

CHAPTER XV.

Discussion of Homœopathy Continued; Quotations from Current Homœopathic Literature; Illinois Homœopathic Medical Association; Refusal to Indorse Similia Similibus Curantur; Homœopathic Society of New York; Resolutions of 1878, '79 and '80; Discussions and Differences of Opinion; Sherman's Milwaukee Test of the Thirtieth Dilution; Final Report Thereon; Internal and Avoidable Obstacles to Homœopathy; Discussion of Homœopathy by a Homœpath, in the *Homœopathic Times;* Examples of Homœpathic Practice; Ludlam's Case of Ovariotomy; Homœopathic Chicanery in Connection with Hospital on Ward's Island; Homœopathy a Divine Truth or a Huge Lie..... PAGE 159–196

CHAPTER XVI.

Summary; Similia; Kidd's Laws of Therapeutics; Contrarii Contrariis; Galen's Law; Cases from Kidd's Practice; Totality of Symptoms and Pathological Lesions; Similar Diseases Associated in the Same Individual; Natural Diseases Essentially Dissimilar; Pathology of no Use in Selecting a Remedy; Drug-Disease; Domain of Similia; Propositions, Discussions and Conclusions; Chemical, Mechanical and Physical Forces; Tonics and Restoratives; Metaphysical Discussions on Therapeutical Laws; Slow Advance of Homœopathy in the Old World; International Hahnemannian Association..... 197–218

PREFACE.

It is expected that every person who proposes to inflict a new book upon the profession should be able to give a good reason therefor.

My object in producing this little work is twofold: First, to furnish the profession a condensed history of the evolution of medicine, or, at least, so much of it as relates to the rise, progress and fall of the various schools, sects, or systems, from the earliest historical period down to the present. This I have done in as brief terms as possible, without any discussion of the contemporaneous systems of philosophy or theology with which medicine in former times has been strangely and inconsistently commingled.

I have also avoided as much as possible discussing the materia medica of the ancients, especially as applied to the treatment of special diseases, which would be of interest only to the medical antiquarian.

My second object is to furnish the regular profession with some much needed information in regard to homœopathy. Few busy practitioners have the time or inclination to investigate the claims of this school, and although they are brought in contact with it daily, know little or nothing of its real principles.

I have presented the principles of this school fairly, quoting the exact words of its founders, at the expense of some repetition, in order that I might not be accused of misrepresentation.

The discussion of these principles has been conducted from a scientific standpoint, and without ridicule, thus showing of what homœopathy consisted originally; and by quotations from the current literature of the school, with discussions thereon, showing what it is now.

It is confidently believed that the condensed information contained in this little book will not be altogether without interest to the profession.

G. C. SMYTHE.

Green Castle, Ind., November, 1880.

MEDICAL HERESIES

HISTORICALLY CONSIDERED.

CHAPTER I.

Ages in Medicine—The Mythological, Dogmatic or Empirical, and Rational—Origin of Medicine—Evolution—Primeval Medicine—Ancient Egyptian Civilization—Epidemics, Plagues, Black Death.

In writing a history of medicine it would seem philosophical to divide the subject into three periods or ages, to be denominated respectively—

I. The Mythological;

II. The Dogmatic or Empirical; and,

III. The Rational.

The Mythological age extends from the infancy of the human race to about the year 400 B.C., and includes what is known from tradition of the early evolution of medicine, together with the meagre facts gained from history during this interesting epoch.

The history of medicine really begins with the Dogmatic or Empirical age, and includes that portion of the time between the Hippocratic period (400 B.C.)

and the close of the eighteenth century, A.D., or the death of the last Dogmatic system, the Brunonian.

The Rational age in medicine begins where dogmatism leaves off; viz., about the close of the eighteenth century and the beginning of the nineteenth. It is founded upon the ruins of the ancient dogmatic schools, together with the new facts discovered about this time by the rapid evolution of anatomy, physiology, pathology, chemistry and the collateral sciences.

The latter two ages are necessarily more or less blended, and seem to overlap each other; yet a distinct line of demarkation can be discovered by the careful student; and, notwithstanding Hippocrates is said to have been the father of rational medicine, from the very nature of things existing at that time, his system could be little better than a rational empiricism.

It is not my intention to write a History of Medicine, but simply to gather so much from the general history of the subject in a condensed form as relates to the rise and fall of the different schools, sects or systems of medicine from the earliest period of which we have any knowledge, down to, and including, some of the more prominent heresies of the present day.

The opinion is almost unanimous among historians, upon this subject, that the origin of medicine can be traced to the ancient Egyptian civilization. This can be only partially true. The art of treating accidents, injuries and diseases must have been brought about among all

primeval nations by the slow process of evolution. This process was necessarily slow, and must have extended over an immense period of time which was pregnant with danger and disaster to the race. Whole tribes or nations perished, or even continents must have been depopulated by epidemics, plagues and pestilential diseases during this long period when the race was struggling up from savagery and barbarism.

What could primitive man have done to stay the ravages of such an epidemic as the one from which our Southern States have recently suffered; or such a plague as the Black Death, which during the fourteenth century is said to have destroyed in China 13,000,000 of the population, and in the other Eastern countries 24,000,000 more? The loss by death from the plague in Europe only was over 25,000,000. A plague was prevalent in London as late as A.D. 1665, where it destroyed in the latter half of that year no less than 76,000 persons. Also in the city of Toulon as late as A.D. 1720, where, out of a population of 26,276 souls, 20,000 were attacked and 16,000 perished. What, I ask, could primeval man do under such circumstances? and we have no reason to believe that he was exempt from such calamities; on the contrary, judging from the careless manner in which he lived he must have been oftener subjected to such pestilences than his more modern successor. We find the remains of slaughtered animals and all kinds of débris capable

of preservation, right in the cave where he dwelt, and "kitchen middings" several feet deep immediately in front of the door of his habitation.

According to the recent investigations of Professor Marsh, this continent is the birthplace of the horse and the monkey. It is not likely that the means of subsistence were ever so precarious as to cause extinction by starvation on such a vast continent as this, but it is far more plausible to suppose that they have disappeared by the ravages of some epidemic disease.

If the evidence brought to light by archæologists is trustworthy, this continent was once inhabited by a numerous and thrifty race of people, who have left behind them traces of civilization greatly superior to that of the inhabitants found here by its European discoverers. It is not likely that this superior race was conquered and annihilated by the lazy, good-for-nothing savages who succeeded them. It is much more reasonable to conclude that they perished by the ravages of plagues and epidemic diseases of different kinds which afflicted them in rapid succession. And they, having no knowledge of sanitary science, would be unable to oppose any obstacle to the progress of such calamities after the germs were once scattered in their midst.

It is highly probable that the human race has been struggling against such influences for a thousand centuries; and it would indeed be strange if some knowledge of agents to ameliorate the condition of the afflicted

were not discovered. Even the beasts of the field, guided by their sensations alone, would soon learn to bathe their fevered bodies in the cooling waters of a convenient brook.

It is altogether probable that the healing art is coëxistent with the race. However rude their practice may have been, with no way of preserving their experiences excepting by tradition, it is little wonder that whole tribes perished, or that continents were depopulated. It would not require much time for a primeval man with a fractured leg to learn that a perfect state of rest would cause him to suffer less pain, and that if the fracture was steadied with a stick or piece of bark, tied on with rawhide, he could move about with more comfort; and after a lapse of a few weeks he would find that he could dispense with his rude splint—in fact, that his wound had recovered, crooked it might be, and perhaps too short, but still a useful limb. This experience would not be lost. He would also learn that cold water, if his limb was too hot, would keep it cool; and if his wound was an open one, that keeping it moist would cause it to be less painful; and hence, he would naturally apply something to retain the moisture, if it was nothing but a fig leaf. But if he should happen to apply some anodyne plant, like stramonium, belladonna, or poppies, he would learn something more, and that something would be treasured up as a precious discovery, for the benefit of posterity. Such is the real origin of the healing art;

it is not a gift of the gods. An immense period must have elapsed while the human family was emerging from this condition, and before diseases were attributed to the anger of evil spirits; for this would necessarily signify the evolution of a moral sense, at least the knowledge of good and evil.

CHAPTER II.

Egyptian Mythology—Isis, Osiris, Horus, Thoth, Apis, Esmion, Serapis—Disease Attributed to the Anger of the Gods—Priests—Demonology—Egyptian Mysteries—Venesection—Clysters—Greek Colonies—Æsculapius—Chiron the Centaur—Machoan—Podalirius—The Asclepiadæ—Pythagoras and his School—Secret Nostrums.

The ancient Egyptians attributed the diseases with which they were afflicted to the anger of their gods. Among their principal deities might be mentioned Isis, sister and wife of Osiris; her son Horus, whose life she miraculously restored, and who is the same as the Apollo of the Greeks; Thoth, the same as Hermes of the Greeks; also Apis, Esmion, Serapis, and many others.

Serapis was worshiped as a medical divinity by both Greeks and Egyptians, as late as the time of Alexander the Great. The origin of medicine is attributed by different authorities to several of these deities. Horus is said to have received his knowledge of diseases and their antidotes from his mother Isis, and he is regarded as the inventor of the art by some. Yet Apis is regarded by equally as good authority as the deity to whom this honor is due; and there are still others who claim that Thoth is the real inventor of all the arts and sciences, including medicine. Of course, at this late date it matters little to us, and less to the gods, to whom we

ascribe this doubtful honor. These gods were all of human origin, but had been deified by a grateful people, for supposed benefits conferred. When the gods condescended to practice medicine it had to be done by proxy, and this created a necessity for middle-men, or a priesthood, as is too often the case with the more modern gods. All diseases were regarded as caused by the displeasure of the gods, and of course, according to that view of their pathology, they could be cured in no other way than by appeasing this displeasure, and no other means could be employed by the multitude in order to approach these gods, than through the medium of the priests who administered in the temples. The sick were bewildered with imposing rites and ceremonies which were as senseless and unscientific as the beating of the tom-tom and the frightful grimaces made by the great medicine-man of the North American Indians. If any medicines were used, their names as well as their virtues, if they had any, were carefully concealed. Their entire practice consisted in a miscellaneous conglomeration of absurdities, of which the following is a good example: They believed there were thirty-six demons or gods of the air, who had divided the human body among themselves, into that many parts, and that by invoking the god who presided over the particular part affected the disease would be relieved.

The sum total of all human knowledge, including what was known of medicine and the collateral sciences,

was supposed to be communicated to those who were initiated into the secrets of the ancient Egyptian mysteries. This knowledge was carefully concealed from the vulgar, and those who were initiated were bound to secrecy by blood-curdling oaths, and required to go through with the most extravagant and absurd forms and ceremonies previous to and during their initiation, sufficient to eclipse by far any of the modern institutions of that kind, some of which are sufficiently absurd, as many of my readers well know. They used venesection, cathartics, emetics and clysters. They claimed to have been taught venesection by the hippopotamus, which, it is said, performed this operation upon itself by striking its leg against a sharp reed and opening a vein in this way, and after the blood had flowed as long as it thought proper filled the wound with mud. The ancient hippopotamus might have amused himself in this dangerous way, but I have no doubt that his modern successor has learned more sense. They also claim to have learned the use of clysters from their sacred bird, Ibis, which is said to have administered them to itself with its bill. So much for ancient Egyptian medicine. Nothing has been lost to the science by our want of familiarity with it.

Ancient Greece was largely colonized by the Egyptians. These colonists brought their deities and their worship along with them, and consequently the mythology of the Greeks was largely borrowed from the

Egyptians; and especially was this the case with medical divinities. But the Greeks were a restless, warlike people, and soon developed a propensity for manufacturing gods that fairly eclipsed all previous efforts in that line, one of their finest specimens being Æsculapius; and as he was their most illustrious god in medicine, it will be well to look into his history somewhat. He is represented as being the son of Apollo and Coronis. He was a student of Chiron the centaur, who, if I am correctly informed, established the first medical college mentioned in history, in a cave or grotto at the foot of Mount Pelion, where he taught medicine, music, botany and chirurgery. Efforts have been made by some etymologists to derive the latter word from his name. Some of the most celebrated names of this period appear among those who were numbered as his students. But as we are concerned only with those who are most illustrious in medicine, we shall confine our attention to Æsculapius and his two sons, Machoan and Podalirius. Chiron lived to a great age, and frequently instructed both father and son, as in the above case. He was accidentally killed by a poisoned arrow, shot at another person by young Hercules, who was also a student of his, and who is reputed as having had an uncontrollable temper. I mention this fact in order to show that the antidote to the poison the ancient Greeks were using on their arrows was unknown, for the wound itself was slight,

being situated near the knee, and would probably not have produced death had it not been poisoned.

Æsculapius distinguished himself above all others as surgeon-in-chief of the expedition of Argonauts in search of the golden fleece, and his fame has been celebrated in poetry, more as a surgeon than as a physician; in fact, he evidently knew very little about the administration of drugs as curative agents. He is reported to have raised the dead, but with as little truth, perhaps, as the same report in regard to the more modern gods. He used songs, dances, incantations, amulets, etc., for the cure of disease. One of his principal medicines appears to have been a mixture of wine, meal and scraped cheese made from goat's milk. His skill in medicine has been greatly over-estimated. He was not deified until after the time of Homer; at least, there is nothing in Homer that indicates that such was the case. Another account places his deification about fifty years before the siege of Troy, which is supposed to have been about 1184 B.C. Æsculapius was destroyed by a thunderbolt from Jupiter, at the special request of Pluto, because he was interfering with the peopling of the latter's empire. Apollo revenged the death of his son by destroying the Cyclops who forged the bolt. So it will be observed that the gods do not always constitute a happy family; a very good argument against having too many.

Machoan and Podalirius, the two sons of Æsculapius,

were at the siege of Troy, and greatly distinguished themselves as surgeons and physicians. Medical knowledge was retained as a secret in this family, and transmitted from father to son, until the time of Hippocrates. His descendants formed a priesthood called the Asclepiadæ, who administered in the temples which were erected in the principal cities to commemorate his worship, much after the manner of the Egyptians. These rites and ceremonies seem rather silly and unscientific to modern physicians, but we must remember that they were not possessed of as valuable a materia medica as we are, and in the absence of such they had to make up the deficiency in pomp and show; and we ought to remember that this very circumstance contributed much in making a favorable mental impression, a thing of real value in the treatment of certain forms of disease, which I shall have occasion to demonstrate before closing this essay, in treating of another branch of this subject.

During the sixth century B.C., Pythagoras, after extensive travels in foreign countries, during which he is said to have learned all there was of human knowledge at that day and age of the world, returned and settled at Crotonia, where he established a school of philosophy and medicine; and owing to his venerable appearance and burning eloquence he was regarded as a messenger direct from the gods—a pious fraud which he encouraged. He soon had numerous disciples and followers, which included some of the most illustrious names among

the ancient Grecian philosophers, such as Empedocles, Democritus, Anaxagoras, and others. Through the teachings of these men medicine and philosophy were connected and taught conjointly, but their practice was almost as superstitious as that of the priests in the temples; in fact, Pythagoras is supposed to have borrowed his philosophy largely from the Egyptians, where he is known to have been circumcised and initiated into the ancient mysteries. His knowledge of the power of drugs must have been very vague and indefinite. He regarded the cabbage as a universal remedy for all diseases, when, in fact, it is almost worthless, even as an article of diet in health, and positively injurious in nearly all forms of disease excepting those based on a scorbutic diathesis, and even in these greatly inferior to many plants.

Medicine, philosophy and religion were strangely and inconsistently commingled for centuries after the time of Pythagoras.

The Pythagoreans were communists, and their practices soon became obnoxious to the people who prosecuted them, and about 500 B.C. their society was disbanded and the disciples of Pythagoras were scattered throughout the cities of Greece, where they divulged the secrets of his philosophy and his practices. Had it not been for this circumstance the world would never have known anything about his system of philosophy, for he left no writings behind him.

This disclosure of the Pythagorean system and its

propagation among the people soon built up a formidable rivalry between his disciples and the Asclepiadæ, who still practiced and taught medicine in the temples, which induced them to disclose the secrets of their system; which brings us down, in the course of time, to the period of Hippocrates. It is also a fact that ought not to escape our notice, that secret nostrums were sold in the principal cities of Greece at least five hundred years before the Christian era; and still the patent-medicine-man flourishes.

CHAPTER III.

Hippocrates—Genealogy—Writings of, and Opinions.

The history of Dogmatic or Empirical medicine, as transmitted to us in a direct line, begins with Hippocrates and his followers. All our information prior to this date partakes largely of the prehistoric or mythological.

Hippocrates was born on the island of Cos, near the beginning of the 80th Olympiad, and consequently was in the prime of life about the year 400 B.C. He was a lineal descendant, seventeen generations removed, of Æsculapius, on the paternal side of the house, and on the maternal side he traced his ancestry to Hercules; a genealogy sufficiently ancient and aristocratic to suit the most fastidious. He is the first of the ancients who left us any considerable amount of literature on the subject of medicine. He is the reputed author of seventeen books or short treatises on various subjects connected with medicine, some of which are genuine, and some of which are known to be apochryphal.

There appears to have been a kind of mania for writing apochryphal books, which originated about this time and continued for several centuries. The authors of some of them imagined themselves to be inspired, but they were evidently inflated only. Be this as it

may, the works attributed to Hippocrates perhaps give us a very accurate view of medicine as it existed at that time. Whether or not they were all the result of his handiwork, several of them are known to be genuine.

It has been said that if Shakespeare's writings were subtracted from the English language and literature very little would remain. The truth of this statement will be readily conceded by persons familiar with the subject, for Shakespeareanisms are found permeating our literature everywhere.

So much could not be said of the writings of Hippocrates in reference to medicine, at this day and age of the world, but it could have been said for several centuries after his death, without any violation of the truth.

Hippocrates flourished when nothing or next to nothing was known of anatomy, physiology, or pathology. Chemistry was yet an unborn science. Not a single trace of chemistry as applied to pharmacy can be found previous to or during the time in which Hippocrates lived. Little was known of Botany; especially of the medicinal properties of plants.

We are struck with wonder and admiration for the man who could so impress the coming ages, with such a small capital to begin with, in the shape of collateral sciences, as he possessed. He was the first who attempted to separate medicine from philosophy and start it in business for itself, and is justly entitled to be called the

"father of medicine." He recognized a certain force which he called Nature, which he regarded as the "*first of all physicians.*" It appears that he relied greatly on this force in the cure of disease, and especially if he did not see his way clearly; a practice which ought to be imitated by the profession of to-day much oftener than it is. He attributed a real intelligence to this force. He says, "Nature is sufficient of itself for every animal. She performs everything that is necessary to them without any instruction how to do it. She distributes the blood, spirits and heat through all parts of the body, by which means it receives life and sensation, nourishment, preservation and growth." He finally resolves this force into heat, which he says is immortal. Not a bad guess for a man to make twenty-three centuries ago, who was not acquainted with the fact, as now demonstrated, that *force* is as eternal and persistent as matter itself! His pathology was altogether humoral. He enumerated four humors—blood, phlegm, yellow bile, and black bile. He regarded imprudence in diet as a frequent source of disease. He treats of diet extensively in his writings. He also considered bad air as a prolific source of disease. He noted the direction of the wind and the irregularity of the seasons, the rising and setting of the stars, the solstices and equinoxes, and observed that these influences had a profound impression on certain diseases. Right here is a vast field for observation, which is of untold importance, and which has not been

sufficiently explored until this day. There is less known of the meteorology of diseases than almost any field in the sciences. The suggestions made by him on this subject seem to have gone unheeded for ages after his death. I have every reason to believe that had he been possessed of the modern appliances for taking observations which we have had so long, he would have laid the foundations for meteorological observations in medicine, which would have borne fruit of great value. Some of Hippocrates' divisions of diseases have scarcely been modified, and words spoken by physicians daily, in the present age, are found in his writings, with the same meanings as at present; such as *acute* and *chronic*; *epidemic, endemic* and *sporadic*; *malignant* and *benign, crisis*, and so on. In prognosis he had superior tact, making some observations that have never been improved upon. His description of the countenance just before death takes place is so true and vivid that it has borne the name of the *Hippocratic countenance* until this day. His theory of disease was based on the four elements of *earth, fire, air*, and *water*; and the four humors already mentioned. He believed that some derangement of these elements and humors constituted the essence of diseases, and that the principle he called Nature prepared them for expulsion from the body by a process he called *coction*, and that they were expelled by a *crisis*.

CHAPTER IV.

The Dogmatic School of Medicine—Prominent Characters in the School—School at Alexandria, 320 B. C.—*Herophilus—Erasistratus—Dissections of Human Bodies Legalized for the First Time in the History of the World—Empiric School,* 287 *years* B. C.—*Pyrrho—Philinus—Serapion—Doctrines and Influence of this School—Methodic School—Asclepiades—Stephanus—Marcus Artorius—Themison—Principles and Influence of this School—Thessalus Trallianus—Celsus—Rufus the Ephesian—Atheneus—Pneumatic Sect or School—Episynthetic or Eclectic School.*

It was the elaboration and propagation of the principles contained in the platform of Hippocrates that led to the foundation of the

DOGMATIC SCHOOL

of Medicine by his disciples and successors.

Prominent mention might be made, in this connection, of Thessalus, Draco, Polybius, Theophrastus, Praxagoras, Plato and Aristotle. These sages all contributed toward enriching the general stock of knowledge in anatomy and physiology, but they soon abandoned the path marked out to guide investigations by the illustrious father of medicine, and the art continued to be influenced by the absurd systems of philosophy of the age, so that little real progress was made until the foundation of the celebrated school of Alexandria, about 320 B. C. Under

the patronage of the Ptolemies this school became the principal seat of learning in the world at that time. Letters, Arts and Sciences were protected and encouraged, and the most learned men of the age were numbered among its teachers.

This school exerted a controlling influence for centuries, and is felt even at the present day in medicine, and especially in anatomy, for some of the names given to certain parts of the body are still retained. A certain portion of the human anatomy will always, perhaps, bear the name of *torcular Herophili*, a term derived from the name of one of the professors of anatomy, Herophilus.

At this institution the dissection of human bodies was legalized, for the first time in the history of the world, and the two most illustrious names in connection therewith are Erasistratus and Herophilus, who were contemporaries. The latter is said to have dissected seven hundred human bodies. Both were said to have opened the bodies of criminals while they were yet alive. These statements are both, probably, greatly magnified, and perhaps had their origin through the popular prejudice that must have existed against practical anatomy at that time.

Erasistratus modified the practice of medicine very much, stripping it of many of its terrors. He opposed venesection, drastic cathartics, irritating clysters, and so on. He was also opposed to what the moderns call "shot-gun" prescriptions, of which there were many in

existence at that time, some of which contained as many as fifty or sixty ingredients.

Herophilus made several additions to the then existing knowledge of the pulse; a subject which had heretofore been much neglected.

The Dogmatic school continued to flourish without serious opposition until about the year 287 B.C., when there arose a formidable rival, which is known by the name of the

EMPIRIC SCHOOL.

The spread of the peculiar skeptical doctrines of Pyrrho, in philosophy, perhaps suggested to Philinus the foundation of this school, but although he was the real founder, it owed its success greatly to Serapion, one of his successors and disciples.

It is a remarkable circumstance in the history of medicine, that a sect which became so numerous, extending over a period of several centuries, and exerted such a powerful influence, which is not now nor ever will be obliterated, should leave us none of their writings. Many distinguished names are mentioned among the disciples of this system, and their writings were numerous and copious, yet our entire knowledge of them is gained by quotations from their works by their adversaries, who so quoted them for the purpose of refutation. Their own testimony in favor of their method of doing business is entirely lost to us, only as transmitted by their opponents in the aforesaid garbled manner, and our

opinion of them is necessarily made up from ex parte testimony. Whether we are able to do them justice at this late day, upon such evidence, is a doubtful question.

They assailed the doctrines of the Dogmatic school with great fury, and abused Hippocrates, although they continued to use his medicines. They rejected all occult causes of disease, and based their system entirely on observation and experience gained through the senses. These sources of information are best arranged under three heads: 1st, personal observation; 2d, the study of the recorded observations of others; 3d, the logical conclusions drawn from a study and comparison of both the preceding. It will be readily seen that here are the germs of an inductive philosophy which would have led to important discoveries if its foundations had been broadened and deepened sufficiently.

The Dogmatic school accused the Empirics of neglecting the study of anatomy and physiology. This accusation must be accepted with some degree of allowance, for it is improbable that a system founded on observation exclusively would neglect two such important adjuncts. Yet there must be some grounds for the accusation, for it is a historical fact that no new discoveries were announced in anatomy from the school at Alexandria, after it passed into the hands of the Empirics, and it is quite probable that the dissection of human bodies was soon afterward abolished.

This school disseminated its doctrines very rapidly,

and soon divided the honors of the profession with the Dogmatic, which gradually declined until the latter part of the second century of the Christian era, when it was revived by Galen.

The Empirics regarded the entire doctrines upon which the Dogmatic school was founded, including the elements, humors, coction, crisis, occult causes, essence of disease, and the famous therapeutic axiom that diseases must be cured by contraries, as false or hypothetical and unnecessary. This school enriched the materia medica somewhat, and by their careful and painstaking manner of making observations have not failed to impress subsequent ages.

But in the meantime another sect had arisen, which was known by the name of the

METHODIC SCHOOL.

The platform of principles upon which this school was founded was furnished by Asclepiades who was born in Bithynia about 96 B.C. He located in Rome, where he became famous as a practitioner. He succeeded in establishing himself firmly in that city, by adopting a course that has been successfully imitated by modern quackery, namely, by flattering the whims and humoring the caprices of his patients, until nature effected a cure of their diseases. He allied himself with the nobility, and was the friend and companion of Cicero. He entertained rather peculiar views of anatomy and physiology, and it is somewhat mysterious how or where he

found such absurd notions. He believed the body was filled with invisible pores, and that corpuscles were continually passing through these pores. He thought hunger was caused by the relaxation of the larger pores, and thirst by the relaxation of the smaller. He was of the opinion that digestion was an unnecessary function; that the food passed directly into the blood, where it was comminuted and attenuated, until it was reduced sufficiently to pass through the pores, before it could be appropriated as nourishment. Of course, his pathology was based on his physiology, and when a person was sick he simply had trouble with his corpuscles, or his pores. Sometimes the corpuscles were too large for the pores, and frequently the pores were too small for the corpuscles. In either case this condition was called stricture, and the opposite condition was relaxation. This was the sum and substance of all diseases, and they were treated accordingly. His treatment consisted in friction, wine, exercise, and bathing.

Asclepiades had numerous and respectable disciples, among whom may be mentioned Stephanus, of Byzantium, and Marcus Artorius, physician to the Emperor Augustus. Artorius was shipwrecked and lost at sea, about 30 B.C. The most illustrious of all his disciples, and the real founder of the Methodic school, was Themison, of Laodicea. He amplified the doctrines of Asclepiades, and labored to establish three divisions of disease. Those caused by stricture, those by relaxation,

and those of a mixed nature; all other causes of disease were discarded.

The Methodic school was sandwiched between the Dogmatic and the Empiric schools. They aimed to avoid the vague theories and occult causes of disease of the former, and escape the laborious experimental observations of the latter; in short, they proposed to open up a royal road and make the study of medicine easy; and, indeed, one of the followers of this school, by the name of Thessalus Trallianus, boasted of his ability to teach the whole art in six months.

Soranus was one of the ablest and most brilliant practitioners of this school, and is spoken of in flattering terms, even by his opponents of the other schools. He died about 140 A.D.

Celsus and Rufus the Ephesian were both inclined to the doctrines of this school. The former was noted for his pure Latin and the elegancy of his style. Neither one, however, contributed any new theory to those already in existence.

This school was subdivided into several sects. Atheneus, of Attaleia, who was a polished and skillful physician, added a fifth principle, which he called *spirits* or *air*, which controlled and directed everything, and, when disturbed, was the cause of diseases; and from this fact this was called the

PNEUMATIC SECT OR SCHOOL.

Areteus was one of the most famous of this sect.

There were eminent physicians after the rise of the three prominent schools already mentioned, who, it seems, were able to divest themselves of prejudice sufficiently to see that neither one of these schools contained the entire truth, but that there was some good in all of them; and like the school of ancient Eclectic philosophers, undertook to select from the three what seemed to them good and proper. This school called themselves the

EPISYNTHETIC OR ECLECTIC SCHOOL.

Of course, they made a failure, as will always be the case with an institution which has no principles of its own. The experience of the world has taught us that an extensive business cannot be safely conducted upon a borrowed capital exclusively. It is better to advocate principles of our own, even though they be erroneous.

Many renowned physicians have been Eclectics, according to the true meaning of the term; but a moment's reflection will convince any reasonable man of the impossibility of establishing a school of Eclecticism; for as soon as an institution attaches itself to a certain set of fixed principles, even though they be borrowed, that institution becomes dogmatic.

There were several prominent physicians that adhered to this school; among them Agathinus, Philip, of Cæsarea, Archigenes, who lived in the time of Trajan, although neither the Methodic nor any of its subdivisions ever had a very extensive following.

CHAPTER V.

Claudius Galen—Biography—Education—Distracted Condition of Medicine—Opportunities for Distinction—Revival and Revision of Dogmatism—His Writings and Opinions—The Impress they Made Upon the Medical World—His Cowardice.

The next prominent character which arrests our attention in the history of medicine is Claudius Galen, who was born in Pergamus, in the year 131 A.D. Pergamus was a formidable rival, as a seat of learning, to the city of Alexandria, having at one time the next largest library in existence.

Galen was well schooled in philosophy, having studied, under his father's tuition, the system of Aristotle. He studied the Platonic philosophy under Gaius, who was also a stoic and an Epicurean. He wrote commentaries on philosophy before he was twenty years old. He seems to have been inclined to skepticism, both in philosophy and medicine, in his younger days. He claims to have studied medicine by the expressed direction of the gods, both he and his father having been advised by Apollo, in a vision, to that effect. He was as well educated in medicine as in philosophy. He received his instruction in anatomy from Satyrus, who had the reputation of being well qualified in this department. He received instruction from distinguished teachers in

both the Dogmatic and Empiric schools. After he had completed his studies in these schools he attended the lectures of Pelops, at Smyrna, after which he traveled extensively. He also visited Alexandria, which still maintained a high reputation as a medical centre, where he remained a considerable time, to complete his anatomical studies. It is not known certainly whether he ever dissected the human body or not; if he did so it was done clandestinely. Most of his descriptions in anatomy are drawn from the bodies of apes. He speaks of the advantages that Alexandria furnished in the study of osteology. It is a fair presumption that the only complete human skeleton accessible anywhere in the world at that time was to be seen in the aforesaid city. There was certainly none in the city of Rome at the time of his sojourn there, which was several years after his pupilage at Alexandria. He is supposed to have died about the close of the second century A.D. He is known, from his writings, to have been living as late as 197 A.D.

Galen's opportunities for distinguishing himself were very great. At the time of his coming the medical world was in a singularly chaotic condition. The Dogmatic school was distracted and divided into several factions; some following the old Hippocratic path; others were disciples of Erasistratus, while still others were adherents of Herophilus. The Empirics, although they had been numerous and influential, were at this

time declining. The Methodics were still enjoying a considerable degree of confidence.

Galen undertook the herculean task of reforming medicine, for which his education had peculiarly fitted him, having studied the principles upon which all the schools were founded, as well as being well versed in all the contemporaneous systems of philosophy. He claimed in the beginning of his career to be an Eclectic, but soon proved himself to be the most bigoted and intolerant of Dogmatics. He claimed that none of his predecessors had understood the writings of Hippocrates, and that he alone was capable of explaining them; and among his first efforts as a medical author are his commentaries on the writings of that distinguished father in medicine.

Galen's writings are very extensive. He revived the principles of Hippocrates, upon which the Dogmatic school of medicine was founded, and after adding his own views, impressed them so firmly upon the medical world that they reigned almost supreme for nearly sixteen centuries. He defined medicine as an art which teaches how to preserve health and cure diseases. He had three conditions for the body, *Sound*, *Unsound* and *Neutral*. A perfectly sound body was seldom or never met with, he thought. He described eight constitutional conditions, based upon the qualities of heat, cold, moisture, and still another peculiarity which is called idiosyncrasy. Disease, said he, begins when the deviations

become so great as to interrupt the functions of the part. He reiterated the Hippocratic doctrine of solids, humors and spirits, also the four humors of blood, phlegm, yellow bile and black bile. He also described three kinds of spirits, *vital, animal* and *natural.* He thought these spirits arose from the blood, which had its origin as a subtle vapor in the liver, and was modified by coming in contact with the air which was received through the lungs. The vital spirits were lodged in the heart, and the animal spirits in the brain, which presided over the reasoning faculties, and by means of the nerves distributed a power of motion and sensation to all parts of the body, which regulated all the functions. This is the force which both Hippocrates and Galen called nature. He, like Hippocrates, divided diseases into acute and chronic, epidemic, endemic and sporadic. He arranged the causes of diseases under two heads, external and internal. The former were six in number, air, food and drink, motion and rest, sleeping and watching, retention and excretion, and lastly, the passions. These he called *Procatarctic,* or *Beginning Causes,* because they put in motion the internal causes which are called the *antecedent* or *conjunct.* The former are discovered only by reasoning, and must consist either in a plethoric condition of the humors or a poisoning of the blood by an undue admixture of the same. He also divided the causes into those that were manifest and evident, and those that were latent and obscure,

occult or concealed, and could not be discovered at all, such as in hydrophobia.

Galen defined a symptom to be a preternatural affection depending upon a disease which follows the body as a shadow. He made a distinction between symptoms and signs of diseases. He divided the latter into diagnostic and prognostic, also pathognomonic and adjunct. Some of these divisions are retained until the present time. His treatment differed little from that of Hippocrates. He indorsed the *coction* of the latter, which has caused untold misery to those afflicted with fevers in past ages. By coction is meant the process by which the morbid material constituting the cause of the disease was prepared for expulsion from the body. Heat was considered necessary to complete this process, and extra covering was piled upon the unfortunate patient, doors and windows closed, heating food and drinks were administered, and nothing of a cooling nature was permitted. Patients were treated for a number of days in this barbarous and inhuman manner. Through the teachings of Galen this unnatural practice was continued until a comparatively recent date.

Galen's system of anatomy was accepted by the entire civilized world, until the time of Vesalius. He wrote upon all subjects connected with medicine in his day. He is the author of eighty-three treatises acknowledged as genuine; and nineteen which are questioned; the reputed author of forty-five undoubtedly apochryphal;

nineteen, fragments of which only have been preserved, and fifteen commentaries on the different works of Hippocrates, besides a number that have been entirely lost. His books on anatomy and physiology are considered the most important of all his writings. His pathology was speculative and imperfect. In diagnosis and prognosis he laid great stress upon pulse. He placed great stress upon critical days, which he believed were influenced by the moon. His materia medica, considered in the light of recent science, is worth little or nothing. He had more faith in amulets than medicine, and he is supposed to be the author of the anodyne necklace so long in favor in some parts of Europe. His practice was based on the fundamental principle that disease is contrary to nature, and that it must be cured by that which is contrary to the disease itself.

After Galen's time the different schools of medicine then in existence gradually declined, and the entire medical world formed one vast system of Galenites, which was a revival and revision of Dogmatism.

His works were translated into the Arabic during the ninth century, and were at once adopted in the East, almost to the exclusion of all other writings. In fact, they seemed to have reigned supreme throughout the whole civilized world, until about the middle of the sixteenth century. An illustration of this assertion may be cited:—

In 1559 A.D., Dr. Geynes was called before the Col-

lege of Physicians and Surgeons of London, for impugning the infallibility of Galen, when he had to make a humble acknowledgment and recantation of his error, in writing, before he could enjoy any further privileges of the College.

The darkest page in the history of Galen is that which records his cowardice. He ignominiously fled from every danger which threatened him. We first read of his fleeing from his native city, Pergamus, in consequence of a revolt which took place in that city early in his life. The appearance of the plague in the city of Rome again struck his soul with terror, and he retired into Greece. Soon after this he was summoned by the emperors Marcus Aurelius and Lucius Verus to attend them in northeastern Italy, where they were warring against the barbarian Germanic tribes; but another pestilence broke out, of which Lucius Verus sickened and died, when he again deserted his post and returned to Rome, where he begged to be allowed to remain, pleading as an excuse that it was the will of Æsculapius, as revealed to him in a vision. Such conduct is calculated to excite derision and contempt among modern physicians, who have been schooled to brave every danger and sacrifice their lives, if necessary, in order to relieve the suffering sick—two notable examples of which have occurred in this country within the last few years. The first was during the War of the Rebellion. The records in the Surgeon General's office show that

more medical officers were killed and wounded on the field, or lost their lives from disease, in proportion to their numbers, than any other line of staff officers in the service. The other example is only too fresh in the memory of every citizen of this republic. It occurred during the recent epidemic of yellow fever which so terribly scourged our sister cities of the South. The conduct of the medical men of these cities and those persons who dared to hasten to their relief, has shed a halo of glory about the profession in that section of the country which time can never efface. And had it not been for the absolute certainty that the presence of unacclimated persons would only add to their burdens, thousands of brave men from the North would have gone to their relief. Let us always imitate the noble example of bravery and fortitude they set us in their terrific battle with death. There will always be room in heaven for such men. They are fit companions for the gods.

CHAPTER VI.

Doctrines and Influence of the Christian Church on the Progress of Medicine — Priestcraft — Prayers, Incantations — Holy Waters, Ointments, etc.—Ignorance and Superstition—Reign of Justinian—Destruction of the School at Athens—The Nestorians—School at Edessa—Baghdad—Preservation of Medicine by the Arabians—Schools in Spain—Rhazes—Hali-Abbas—Avicenna—Albucasis—Improvements Introduced by the Arabians.

The doctrines of the Christian Church, as understood during the early centuries of the Christian era, opposed a formidable obstacle to the progress of medicine. The idea prevailed extensively that the power of curing diseases by divine interposition was received from Christ by his disciples, and had been transmitted to the elders and deacons in each community where churches had been established. A belief in this power contributed more to the establishment of Christianity than any other thing connected therewith. The people had escaped from the clutches of the priesthood of the Asclepiadæ—who practiced medicine in the ancient temples of Æsculapius more than five hundred years previous to this time—only to be enslaved by a more bigoted and intolerant priesthood.

The former, in addition to their tomfoolery, absurd rites and ceremonies, had cultivated medicine as a real

Medical and Chirurgical LIBRARY 57434 University of Maryland

art, and were making some progress therein; but the latter abandoned the use of medicinal agents and resorted to such means as the laying on of hands, anointing with holy oils, ointments, and holy waters, prayers, incantations, relics of saints and apostles, and so on. According to this method of curing diseases a knowledge of the structure of the human body was unnecessary, and consequently anatomy languished and died. It made no difference how the different organs performed their functions, the cure was effected all the same, and physiology was not cultivated. Pathology was not of the slightest consequence, and as little or no value was set upon the use of medicine, a knowledge of materia medica and chemistry was regarded as useless; hence, a cultivation of all the sciences necessary upon which to found a rational system of medicine was neglected, and in many instances positively forbidden.

The same ignorance and superstition in a more refined form which had prevailed in Egypt two thousand years before, in regard to the influence of the gods in producing disease, was revived.

All diseases, plagues and pestilences were regarded as a providential visitation for some imaginary or real sin, and although human sacrifices, or the sacrifice of animals or the first fruits of the earth, were not resorted to to appease the wrath of the offended divinities, the same methods, in the way of prayers, incantations, etc., were

adopted, but addressed to other gods. For my own part, I have more confidence in a few barrels of carbolic acid or chloride of lime in arresting an epidemic than I have in all the petitions which ever ascended to the throne.

Cures were often effected, however, in this way, principally of chronic diseases and nervous disorders, which class of cases is the most easily influenced by mental impressions, which is the real modus operandi by which they were relieved, as it was by the Asclepiadæ in the ancient temples. If the patients did not recover and pestilences cease their ravages, it was because it was not the will of Him whose servants they represented themselves to be.

During the fourth and fifth centuries Christianity extended its doctrines throughout the Roman Empire, and the pagan philosophers, who still taught philosophy, the arts and sciences, as well as medicine, were everywhere persecuted by the bigoted and intolerant Christians; and during the reign of Justinian, 527–565 A.D., they were deprived of their annuities, which had been conferred upon them ages before, and were compelled to seek safety in foreign countries. The renowned schools at Athens and other places were completely obliterated.

A few words by way of digression are necessary to explain how medicine was transferred from the Roman Empire to Arabia.

Slight differences of opinion among Christians were sometimes sufficient to lead to the most bloody tragedies.

In 429 A.D. Nestorius was elected Bishop of Constantinople, where he began to persecute all heretics, and invoked the aid of the civil authorities to help him free the country of them. But he was soon persecuted in turn, because he could not square his belief by the inflexible rule of orthodoxy. His offense consisted in denying that Mary was the mother of God. He did not believe that humanity could be the parent of divinity, and that the latter could receive nourishment and sustenance through the body of the former, or could suffer or die. He did not deny, however, that both divinity and humanity were united in the person of Christ, but claimed that Mary was the mother of the latter only—a very sensible view of the matter, and one that would not excite such a bitter controversy among the more intelligent Christians of to-day. For preaching this doctrine Nestorius was banished to Tarsus, where he was captured by the barbarians in 435 A.D., and soon afterward met with an accidental death.

I give this brief biographical sketch of Nestorius because the sect of Christians which bore his name was the means by which medicine was conveyed into Persia and Arabia, and consequently the first step on the road to its preservation from total destruction.

The Nestorians, after their expulsion from the Empire, settled at Edessa, in Mesopotamia, where they established a school of medicine which soon became renowned, and students gathered there from all countries

to be instructed in the art. They taught clinical medicine in a public hospital, which is thought to have been the first institution of the kind established in the world for that purpose. They found an asylum in this infidel country, where they were protected and encouraged. They established schools at other points; and be it said, to the shame and disgrace of the church, and to the credit and honor of the Persians, that there was more religious tolerance in the country of the latter than in all Christendom.

It was by means of these schools established by the Nestorians, and the teachings of the philosophers who were expelled from Athens by Justinian, that medicine and other arts and sciences were introduced into Arabia, where they were preserved for a period of nearly ten centuries, and restored to the West after the revival of letters in the fourteenth century.

During the eighth century (762–766 A.D.,) the Caliph Almansur built the city of Baghdad, which became famous as a seat of learning. A medical school was established here, at which the number of students in attendance at one time is said to have been over six thousand. It was under the patronage of these schools and the authorities who protected and encouraged them that the works of the ancient Greek physicians and philosophers were translated into the Arabic. This was accomplished under the reign of the Caliph Almamun, in the first half of the ninth century. They also established num-

erous schools in Spain during the eighth century; the most famous in the world was the University of Cordova, founded by Alhakem the Second. Before his death he had collected 600,000 volumes of manuscripts, of which the catalogues alone filled forty huge folios.

The arts, sciences, music and medicine were taught in this university, and the inhabitants of this city were the most highly cultured of any people in the whole world at that time.

Many authors in medicine appeared from time to time, among the Arabians, of which there were over two hundred and fifty in Spain alone.

It is altogether foreign to my purpose to give any extracts from their writings, as they produced no new theories or dogmas upon which any new sect or school was founded, which is the particular line of information sought in preparing this essay. Among their most prominent authors may be mentioned the following: Rhazes, who was famous about the close of the ninth century. He was a professor in the renowned school at Baghdad. The most valuable of his works were on the subject of chemistry, of which there were several volumes.

Hali Abbas flourished about the close of the tenth century. Among his writings his work on diet is considered a good production for the age in which he lived.

Avicenna, another one of their celebrated authors, was born at Bokharra, in Chorassan, about 980 A.D. He

was the author of a renowed work, called the *Canon*, which had a great reputation in some portions of Asia and Europe for a period extending over five hundred years.

Albucacis was born near Cordova, Spain, some time during the latter half of the eleventh century. His best production was a small work on surgery, written late in life.

Taking the general average, we are compelled to say that medicine was not much improved by its sojourn among the Arabians. Anatomy, physiology and surgery retrograded. They followed Galen blindly in anatomy, the original text of whose work was erroneous to a great degree, and it suffered severely by an incorrect translation. Chemistry was considerably improved, as was also materia medica. They gave us several new remedies, which were valuable acquisitions, and many of them are still in use. They were the first, perhaps, to discover the process of making sugar, although the cane and its juice was known to the ancient Greeks. They certainly introduced syrups into pharmacy. They also brought the process of distillation to the attention of the world, if they did not invent it, thus giving us alcohol and the various tinctures made therefrom.

CHAPTER VII.

Progress of Medicine in the West—Destruction of Roman Empire— Ecclesiastics— Oribasius —Ætius — Alexander of Tralles—Paulus Ægineta—Attempted Revival of Letters during the Reign of Charlemagne—Theosophy and Astrology —Schools of Monte Cassino and Salerno—Cures by Prayer —Revival of Practical Anatomy by Mondini, 1315 A.D.— *Important Events during the Century—Cabalistic Medicine— Cornelius Agrippa—Jerome Cardan—Paracelsus—Chemical School of Medicine—Doctrines of, and their Influence.*

During the time when medicine was protected and encouraged in Arabia the progress of contemporaneous events in the West was calculated seriously to discourage its development. The invasion and destruction of the Roman Empire by the barbarians almost extinguished the last ray of light, and universal darkness and gloom settled like a funeral pall over the entire country.

The practice of medicine passed into the hands of the ecclesiastics; and finally, the members of the superior clergy were forbidden to practice; but the lower orders, such as deans, sub-deans and monks, were permitted to continue, but were positively forbidden to draw blood, or use the actual cautery, under the penalty of excommunication.

During the first ten centuries of the Christian era but

few names as medical authors shine with sufficient brilliancy to pierce the dark curtain that veils that period. Prominent among those not already noticed may be mentioned the following :—

Oribasius, a celebrated physician of the fourth century, and much esteemed by the Emperor Julian. He abridged the works of Galen and the most important works of the ancients, at the request of the emperor. This abridgement comprised about seventy books, of which less than one-third have been handed down to us. He accompanied Julian upon his campaigns in the East, but was unable to prevent his death from a wound received in battle with the Persians. After Julian's death Oribasius was captured by the barbarians.

Ætius was born in Amida, Mesopotamia, about the close of the fifth century. He is celebrated as a compiler. He is the author of a book called the *Tetrabiblos*, which is a collection of the opinions of all the authors who preceded him, and is consequently valuable as a historical work.

Alexander, of Tralles, was also an author of this era, and improved the practice in some unimportant details, but produced no new theories.

Paulus Ægineta is worthy of particular mention on account of his fame as a surgeon and obstetrician, being regarded as the real founder of the latter science. He was born on the island of Ægina, about the close of the sixth century. He was educated at Alexandria, and was

in his prime during the first half of the seventh century. He made a valuable compilation from the writings of his predecessors, which contained almost everything of value known of medicine by the ancient Greeks. We possess a good English translation of his work, which, as a matter of medical history, is unsurpassed in value.

A feeble attempt was made during the reign of Charlemagne (767-814 A.D.) to revive letters in the West, and although he was illiterate himself, being unable even to write his own name, he encouraged learning in others, established a society at his court, of learned men, composed mostly of foreigners, to whom he presented a valuable library. He also established schools in connection with various convents throughout his kingdom, and in 805 A.D. he ordered medicine to be taught in some of these schools, under the name of *Physic*, from which circumstance the name physician was first applied to those practicing the art.

For several centuries succeeding this period medicine was taught and practiced almost exclusively by ecclesiastics, and theosophy and astrology were strangely and inconsistently commingled with it. We are struck with amazement at the ignorance and superstition that existed, even among the most learned, during that period.

Schools were established by the monks at various points throughout all Christendom. Two of the most celebrated were located at Monte Cassino and Salerno, in the Kingdom of Naples. Until about the close of

the tenth century diseases were cured exclusively by prayer at both these schools; but during the eleventh century the works of the Arabians were translated by Constantine, the African, and they began to mingle science with their superstition.

Anatomy, physiology and chemistry were not studied in any of these schools, and consequently little or no progress was made.

During the thirteenth, fourteenth and fifteenth centuries medicine in the West failed to advance as rapidly as the revival of learning would seem to warrant us in expecting. Some progress was made, however, in France, Germany and England. Spain, after the expulsion of the Moors by the Christians, was again enveloped in ignorance and superstition.

Practical anatomy was revived in 1315 A.D., by Mondini, a professor in the school at Bologna, who dissected two human bodies before his classes—the first time this had been attempted since the days of Herophilus and Erasistratus, about 320 B.C. Not much immediate benefit, however, was realized from this innovation. It was impossible at this time to make headway against the pernicious influence of astrology and theosophy, which had infested all the schools. More attention was paid to the reign of certain stars than to the study of any science which could be of real advantage to medicine. Exalted virtues were ascribed to medicines prepared during the conjunction of Venus and Jupiter. This

and similar nonsense was taught in nearly all the schools, and the number of minds not affected thereby is said to have been remarkably few.

Many important events occurred in this century which gave an impetus to learning. Emanuel Chrysoloras, an ambassador from the Eastern Empire, delivered a course of lectures in Italy, on the Greek language and literature.

During the disintegration of the Eastern Empire by the Turks, many sages escaped the country, bringing their literary treasures with them into Italy, and by this means the original Greek text of many works was restored, having been previously known only through the Arabic translations, which, in many cases, were very erroneous.

But the most important event which occurred during this century, and the one above all others which contributed more to the dissemination of human knowledge, was the invention of the art of printing, by John Gutenburg, in 1438 A.D., which process was brought to a considerable degree of perfection by the joint labors of himself and Faust, by 1460 A.D.

During the remainder of the fifteenth and the first part of the sixteenth century, the works of Hippocrates and Galen were translated in England, France, Germany, and Italy, and the profession was being gradually brought back to the path marked out by these two eminent fathers in the art. But the same gross errors and

superstitions that had disgraced the world during previous times had to be met and combated. Cabalistic and astrological theories were advanced and advocated by various parties. Cornelius Agrippa sowed the seeds, throughout all Europe, of a doctrine fully as degrading as the demonology of the ancient Egyptians during the mythological age. He believed that everything in nature was the habitation of demons—air, fire, water, land, men, animals, etc. He believed that these demons were the cause of all diseases, and, of course, the treatment prescribed in accordance with that view was necessarily absurd in the same degree. He died at Grenoble, in 1535 A. D.

Jerome Cardan was another eminent disciple of Cabalistic medicine. He was born at Pavia, in 1501 A. D. He received an excellent education, and was professor of mathematics for a short time at Milan. He traveled extensively, but was more of a vagabond than anything else. His writings are absurd in some respects. He taught that the different parts of the body are under the dominion of different stars. He records the most extravagant stories, visions, dreams, sorceries, etc., and explains them by means of the cabal. He died at Rome in 1576 A. D.

Paracelsus, the founder of the

CHEMICAL SCHOOL OF MEDICINE,

was born in a small village near Zurich, in Switzerland, in 1493 A. D. His real name was Hohenheim, but on

beginning his professional career he assumed the high-sounding cognomen of Phillipus Aureolus Theophrastus Bombastus Paracelsus, a name which is somewhat of an index to the character of the man. His education was limited. It is doubtful whether he ever attended any regular school. His father, who was a physician and chemist, instructed him to the best of his ability, after which he advised him to travel and be instructed by the most learned men in various countries. He did travel over a large portion of the civilized world, but instead of attending lectures in the universities, he seems to have sought the company of magicians and alchemists, boasting that their knowledge was superior to that taught in the schools. His natural inclinations led him to adopt the chimerical theories of the cabal. He openly boasted that he had not opened a book for ten years. He probably maintained himself during his travels by selling quack nostrums and performing feats of magic, in which his knowledge of chemistry was a great assistance to him. His reputation soon became so great that he was called upon to treat a great many dignitaries, and he boasted that he had cured thirteen princes whose cases had been regarded as hopeless by other physicians. He was patronized and encouraged by eminent men; among them may be mentioned Sigismund Fugger, whose family was celebrated for the patronage and protection they gave to the arts and sciences. By the recommendation of Ecolampadius, he was appointed

professor of physic and surgery at Basle, Switzerland, where he began his career by abusing his predecessors and contemporaries. He publicly burned the works of Galen and Avicenna, exclaiming that "*Galen did not know as much as his shoe latchets,*" and that "*reading never made a physician. Countries,*" said he, "*are the leaves upon which nature's laws are written, and patients are my only books.*" By his neglect in studying books he had forgotten what little Latin he had learned from his father, and was compelled to deliver his lectures in the vulgar vernacular. His class-room, at first was filled to overflowing, but was soon deserted. About this time he became exceedingly intemperate, being drunk every day, never undressing himself, and always sleeping with his sword buckled upon him; frequently arising in the night, and, during his delirium, flourishing it around the room in such a reckless manner that his secretary, who relates these circumstances, expected each moment to have his head severed from his body.

Paracelsus did not retain his professorship long. His intemperate habits and uncontrollable temper soon engendered difficulties, which caused his expulsion from Basle by the town council, and he recommenced his wanderings. Everywhere he went he excited a furious hatred between himself and the regular faculty, which, at Salsburg, resulted in his being thrown out of the window of an inn by the doctor's servants, the fall breaking his neck. This event occurred in 1541 A. D.

It is a matter of surprise to modern students in the history of medicine how such an ignorant boaster as Paracelsus could so impress his doctrines upon the medical world that their influence should be felt for centuries after his death. The age seemed to be ripe for such an adventurer. He forms the connecting link between alchemy and chemistry, and notwithstanding he was regarded as the founder of the chemical school of medicine, his knowledge of that science must have been vague and indefinite. He asserted that the human body was composed of salt, sulphur and mercury, and that in these elementary principles resided health and disease; that mercury, by its volatility, caused mortifications, madness, delirium and frenzies; and that fevers, inflammations and jaundice were caused by the sulphurous principle; and colic, calculus, gout and rheumatic diseases were the legitimate offspring of salt. He introduced several metallic substances to the attention of the profession, as medicines, such as mercury, lead and antimony. The latter he regarded as the prince of all medicines, a perfect cure-all for every disease with which mankind is afflicted. He also used opium, which was opposed, at that time, by the Galenites. He administered those remedies with an unsparing hand, and effected some brilliant cures, of which there can be no doubt. His reckless manner of prescribing them, however, must have caused great harm in other cases. His method of doing business has been successfully imitated by

modern quackery. He seemed fully to understand the weak points in the prevailing systems of medicine, and assaulted them without mercy, and proceeded to inaugurate a system of his own; and although it is little better than a bundle of absurdities, it marks the beginning of a new era in medicine, and forms another step in the painfully slow process of evolution which finally lays the foundation for a rational system.

The fundamental principle upon which the system of Paracelsus is based is, that *disease does not consist of disordered blood, phlegm or bile, but has an actual existence of its own, subject to its own laws, and acts as a blight upon the body, and must be cured by specific medicines.*

The world has, perhaps, been a little severe in its criticisms upon Paracelsus. It is known that he always stirred up a violent controversy in the profession wherever he journeyed, and this leads me to suppose that justice has not been done him by his contemporaries; and owing to the unfortunate habit of intemperance, which he contracted early in life, his own writings cannot be taken as an index of his real merits, for they were dictated to his secretary at odd times, when he was not professionally engaged, and occasionally when he was delirious from the effects of liquor. This accounts for the disconnected and incoherent style in which they are written. The greatest benefit which posterity derived from his existence was the stimulus

he gave to the study of chemistry. The study of this science was taken up by his successors, and rescued from the hands of the alchemists, and assigned to its proper sphere in the medical sciences, and has since been brought to such a state of perfection that it is justly regarded as one of the chief corner-stones of the temple erected to Rational medicine.

The doctrines of the Chemical school spread rapidly through England, Germany and Italy, being adopted in nearly all the universities. They were resisted for a considerable time in Paris, owing to the influence of John Riolan and Guy Patin; but after the death of these eminent professors they were adopted in nearly all the schools of France.

CHAPTER VIII.

The Rosicrucians—Mystery Connected with the Origin of this Sect—Their Absurd Pretensions—The Eclectic Conciliators—Belief in Witchcraft—Transmutation of Metals—Demonology, etc.—Mathematical School—Borelli—Principles of this School—Bellini—Unrealized Expectations of this School.

The progress of scientific medicine was also impeded during this period by a fanatical sect called the

ROSICRUCIANS

The origin of this sect is veiled in impenetrable mystery. No secret society that ever existed preserved its secrets as successfully as did this one. The origin of this society has given rise to much discussion, and a great variety of opinions have been expressed in regard thereto. It is supposed to have been an offshoot from a society established in the fourteenth century by several monks, with Father Rosenkreuz at their head. They have been confounded by various authors with the orders of the *Rosy Cross*, *Sancti-spiritus*, *Immortales*, *Invisible Brothers*, and many others.

They pretended a familiarity with all the sciences, and especially medicine, of which they claimed to be the restorers. They claimed to possess important secrets, which they had received from the Egyptians, Chaldeans, the Magi and Gymnosophists, which had never been divulged to the world, and by which they could restore

youth. They also claimed to be in possession of the philosopher's stone; so it will be seen that their capital stock consisted mostly of absurd pretensions. Whatever may have been their claims to antiquity, they are not known in medicine until the seventeenth century. In the beginning of this century public attention seemed to have been centered upon religion, mysticism, astrology, alchemy and other occult sciences. This sect seemed to play upon the credulity of the age. They cured disease by working upon the imagination of their patients, and are sometimes alluded to as *faith doctors.*

During this century there also appeared another sect, known as the

ECLECTIC CONCILIATORS.

Some of the physicians who attached themselves to this school were well versed in the literature of the profession, among whom may be mentioned Daniel Sennertus, who was born in Breslau, in 1572 A. D. In 1593 he attended the school at Wittemburg, where he studied philosophy and physic, after which he visited the universities of Leipsic, Jena, Frankfort and Berlin. Returning to Wittemburg he was promoted to a professorship in the faculty. He was the first to introduce the study of chemistry in that city. He gained a great reputation as a practitioner of medicine and also as a philosopher. He died of the plague in 1637 A. D. The disciples of this school added the most absurd doctrines to their knowledge of chemistry. They believed in the

transmutation of metals, the influence of witchcraft, demonology, or in the possibility of communing directly with the devil himself. All these absurd notions contributed extensively toward retarding the progress of scientific medicine.

The next sect which claims our attention is known by the name of the

MATHEMATICAL SCHOOL.

This school was founded by Giovanni Alphonso Borelli, who was born at Naples in 1608 A. D. He was educated at Florence, and soon achieved a great reputation as a mathematician and astronomer. He was a professor at Pisa, and afterward at Messina, but having taken part in a revolt which took place in the latter city, he was compelled to flee for his life, and took up his residence in the city of Rome, where he was protected and patronized by Queen Christina, of Sweden. He died in the latter city in 1679.

He is the author of a work called *De Motu Animalium*, in which he ingeniously applies the laws of mechanics to the motions of animals, regarding the bones as levers, in which the power acts between the weight and the fulcrum; thus endeavoring to calculate the power of the muscles in the different portions of the body, and the amount of force expended in the performance of their functions.

A celebrated pupil of his, named Lawrence Bellini, who was born at Florence in 1643 A. D., and who was

a skillful anatomist and professor at Pisa, undertook to explain the functions of the several organs of the body upon the same mathematical and mechanical principles. Various physiologists took this matter up, and in a short time the entire functions of the body were explained upon a purely mathematical basis, and the power of each organ was carefully calculated; that exerted by the stomach in the way of compression was sufficient to destroy any living body, while the force of the heart in driving the blood through the system was estimated by some physiologists to equal a force of one hundred and eighty thousand pounds, while others placed it at less than one pound. The Mathematicians soon disseminated their doctrines throughout all the universities of Europe, superseding the theories of the Chemists.

This school furnished no theory upon which to base the therapeutical application of remedies, but busied itself with physiological theories.

It was thought by many, after the promulgation of the brilliant results achieved by Kepler, Newton and Galileo, through the application of mathematical reasoning to the laws of the universe, that a similar process applied to the laws governing the animal economy would prove infallible, and that all the secrets of life would in like manner be discovered. It is hardly necessary to add that these brilliant expectations were never realized.

CHAPTER IX.

Brilliant Progress of Surgery—Evolution of Anatomy—Knowledge of the Ancients upon this Subject—Cannibalism—Knowledge gained by Embalming—Prejudices against Dissections by the Jews, Greeks, Early Christians—Roman Laws upon the Subject—Rufus the Ephesian—Galen—Mondini's Work on Anatomy—Carpi—Sylvius—Andrew Vesalius—Michael Servetus—Harvey—Progress of Medicine and Collateral Science During the Remainder of this Century.

While practical medicine was languishing under the baneful influences heretofore enumerated, surgery, under the impetus given to it by the revival of practical anatomy, was making a brilliant progress. A knowledge of practical anatomy has been regarded by intelligent physicians of all ages as the real foundation upon which our entire structure must be reared, and the impediments of various kinds which had to be overcome before the study of this necessary branch of the art could be prosecuted form one of the principal causes why so little progress was made in medicine for so many centuries.

As before stated, the dissection of human bodies was legalized for the first time in the history of the world, at the school of Alexandria, about 320 B.C. Under the protection and patronage of the Ptolemies, Erasistratus and Herophilus prosecuted the study of practical

anatomy with great energy, but, unfortunately, their writings were mostly destroyed, only fragments being preserved. After the death of these eminent men, and their protectors, and the rapid spread of the doctrines of the Empirics, who did not encourage the study of practical anatomy, dissections were abandoned. No member of the Methodic school, although many of them were educated at Alexandria, is supposed to have studied practical anatomy, it having been abandoned before this school was founded. Asclepiades, the originator of the Methodic school, who, it appears, like many modern quacks, embraced the profession after having failed in several other departments of business, knew little or nothing about it, judging from his absurd notions about invisible pores and corpuscles, unless it be conceded that he had knowledge of the capillary vessels and the blood corpuscle, which is not at all probable.

The evolution of anatomy forms within itself an attractive study. Some knowledge of anatomy must have prevailed in primeval times, for men while in that state must have met with various accidents and injuries while engaged in conflicts with wild beasts and with one another.

Cannibalism and the custom of offering human sacrifices, which at some time during the process of evolution must have been common with nearly all prehistoric nations, ought to have revealed some knowledge of this

subject. But, there being no way of transmitting such knowledge, except by tradition, it could not be preserved for the benefit of subsequent ages. The process of embalming the dead, as practiced by the ancient Egyptians, was performed in such a bungling manner that nothing of importance, even concerning the organs removed, could be learned, the brain being twisted out through the nose with a crotchet, and the abdominal organs removed through a small incision made in the side with a a stone knife. There existed great prejudice among the populace against even this slight mutilation, and those performing it were frequently in danger of violence. The dissection of human bodies seems to have been repugnant to most of the ancients, on account of their religious notions.

The Jews believed that man, instead of being the image of an ape, was made in the image of a God, and consequently, his remains after death were sacred. Both the Jews and the Arabs, after touching a corpse, were considered unclean, and had to undergo the ceremonial process for correcting that condition.

The Greeks believed that the souls of the dead were compelled to wander upon the banks of the river Styx until their bodies were buried.

No nation, however, ever opposed such formidable obstacles to practical anatomy as did the Christian Church, during the first centuries of its existence. The doctrine that the body was to be raised in the flesh

was commonly believed in those days, and this belief rendered its mutilation after death very repugnant. During the first centuries of the Christian era the dissection of human bodies was prohibited, under heavy penalties. Some of the popes issued bulls of excommunication against any person guilty of such practices, and forbidding all good Christians from holding any communications with them.

A Roman law forbade the use of dead bodies for dissection. Rufus, the Ephesian, who taught anatomy (112 A.D.) used animals for the purpose of demonstration, but states in his writings that "of old human bodies were used for this purpose."

Galen (131-201 A.D.) dissected apes, as being more like human subjects than other animals.

Not a single subject was dissected by the Arabians while medicine sojourned with them. Some of their professors, like Democritus of old (400 B.C.) visited the cemeteries for the purpose of studying osteology, and in this way some of the errors of Galen were corrected. But when application was made to the civil authorities for permission to dissect fresh subjects they were informed that the application of itself was a violation of the law.

Under the influences just enumerated there were no advances in practical anatomy until it was revived by Mondini, in 1315 A.D., who demonstrated it by dissections before his classes, and prepared a work upon the

subject, which was used as a text-book in some parts of Europe for nearly two hundred years. He declined to open the cranium, for fear of committing an unpardonable sin.

Soon after this several of the universities once or twice each year had demonstrations of this kind. Little addition, however, was made to the knowledge already existing upon the subject, for the prosection was made by a barber's boy, with no other instrument than a common razor, and was necessarily of a clumsy and unskillful character.

Illustrious names, however, during the two succeeding centuries began to shine in this department, among whom may be mentioned—Beringer de Carpi, Sylvius, Eustachius, Fabricius, Michael Servetus, Andrew Vesalius, Harvey and many others. To give even a brief account of all the discoveries made by this list of distinguished names would swell this essay to encyclopedic proportions. I shall, therefore, confine myself to a short sketch of two or three of the most important.

Andrew Vesalius was born at Brussels in 1514 A. D. He studied the classics at Louvain, and anatomy and medicine at Cologne, Montpellier and Paris. He was an enthusiast in the study of practical anatomy. At a very early age he began the dissection of animals, which he prosecuted with great energy. His first human skeleton was that of a criminal whose bones had been picked clean by birds of prey. He labored the entire

night before he could free it from the chains which bound it to the stake, but finally succeeded in carrying it off in triumph. At Paris he was the student of the celebrated Sylvius, but he was unable to restrain his enthusiasm for practical anatomy, and began his dissections on his own responsibility, and is said to have contested with the dogs and vultures for the possession of the bodies of executed criminals. He also resurrected bodies with his own hand, in the public cemeteries, where detection would have resulted in certain death, for that was the penalty affixed by law at that time, for such offenses. At the age of twenty years he began to give private instructions in anatomy to his fellow students. At twenty-three he was a professor of anatomy at Padua, and at twenty-eight he published his great work on anatomy, which revolutionized the science. In this great work, which was illustrated by drawings from nature, the authority of Galen, which had not been heretofore disputed, was boldly assailed, and of course provoked much angry discussion, which finally resulted in great good, as practical dissections were everywhere appealed to in order to settle the disputed points, and the truth was ultimately arrived at.

Vesalius lectured on anatomy in Bologna and Pisa, and in 1544 A. D. was made physician in chief to Charles V, at Madrid, having achieved a great reputation as a practitioner as well as an anatomist. Here he met with an unfortunate circumstance which caused his ruin. A

young Spaniard, of noble birth, sickened and died under his treatment. His relatives granted Vesalius permission to make a post-mortem, and from some unaccountable cause he committed the serious blunder of opening the body while the heart was still pulsating, and the friends became incensed and prosecuted Vesalius with great vindictiveness before the Inquisition, and had it not been for the timely interference of Philip II, his career would probably have been brought to a close at that time. The penalty finally fixed upon was a pilgrimage to the Holy Land. He arrived at Jerusalem without serious accident, and while sojourning there he received notification of his election to the Chair of Anatomy at Padua. In returning to Europe, he was shipwrecked on the island of Zante, where he died, from hunger and exposure, in 1564 A. D.

Michael Servetus, a native of Spain, was somewhat of an erratic genius. At the age of nineteen he left his native country and began the study of law at Toulouse, but soon abandoned it for theology; but his original way of thinking, together with the argumentative character of his mind, soon involved him in a controversy with his preceptors, who denounced him severely. Owing to the unpleasantness occasioned by this discussion, Servetus fled to Paris, where he began the study of medicine, under the direction of the celebrated anatomist, Sylvius, where in due time he graduated with honor. He prosecuted his studies in medicine with

all the energies he possessed, and was the first to demonstrate the circulation of the blood through the lungs, which is the only really valuable contribution he made to the science. No matter in what business he engaged or where he went he seems to have created a disturbance. He assailed the profession in general, and Galen in particular, in a work published in 1537 A. D. After this he mingled too much theology with his medicine, and became involved in a controversy with John Calvin, which resulted in that eminent apostle of the Reformation having him cremated alive, October 27th 1553. Thus perished one of the most original thinkers of the sixteenth century; a man who was fully three centuries in advance of the age in which he lived; a man to whom posterity has as yet failed to do justice; but as the veil of ignorance, superstition and intolerance which has so long obscured the intellect of the world is lifted—and the time is coming—the name of Michael Servetus will shine with brilliant lustre, and that of John Calvin will go down to posterity steeped in the infamy it so justly deserves. This tragical occurrence ought to have served as a perpetual warning to the physicians of all subsequent ages not to mingle too much theology with their medicine; but unfortunately it did not, for we still see occasionally a physician with a bible in one end of his pill-bags.

William Harvey was born at Folkstone, in Kent, in 1578 A. D. He received a fine classical education, after

which he studied medicine at the University of Padua, under the tuition of Fabricius, and Julius Casserius, and other famous teachers attached to this school, which at that time was one of the most celebrated in the world. After graduating with honor he returned to England in 1602 A. D. In 1609 he was appointed physician to St. Bartholomew's Hospital, and in 1615, Lumleian lecturer at the College of Physicians, which position he held for forty-one years. During the early portion of his career as a lecturer he began to demonstrate his discovery of the circulation of the blood to his classes, but did not publish it to the world until about ten years later. This was the most important discovery of the age, and marks the beginning of a new era in anatomy and physiology, and opened up the way to other investigations of great importance to the science. Strange to say this discovery met with the most violent opposition, especially from the older members of the profession. The rising generation generally espoused the cause of Harvey and truth. It was fully twenty-five years before all opposition was silenced. Harvey also made a valuable contribution to the then existing knowledge on the subject of generation. He occupied a conspicuous place in the profession, having been chosen, in addition to his other honors, physician to Charles I. whom he accompanied during his campaigns.

Harvey was devoted to his profession, bequeathing nearly all his property to his favorite institution, the

College of Physicians. He died of gout, June 3d, 1657. The progress of anatomy, physiology and chemistry during the remainder of this and the eighteenth century was remarkably rapid. Previously physiology had occupied a subordinate position, owing to its intimate association with the Chemical and Mechanical sects, but now both physiology and chemistry were rapidly advanced to their proper rank in the sciences; but the most brilliant discoveries in both these departments were reserved for the nineteenth century.

CHAPTER X.

Progress of Medicine During the Close of the Seventeenth Century and the First Half of the Eighteenth—New Schools Founded Upon Improvements in Physiology During this Period—Expectant School—Ernest Stahl—Principles and Practice of this School—Hoffman's System—Boerhaave—Cullen's System—The Brunonian System—The Last of the Dogmatic Schools.

During the closing years of the seventeenth century and the first half of the eighteenth, when physiology was still overburdened with theoretical speculations, there arose several new systems of medicine, which seemed to be a natural outgrowth of the imperfect knowledge of this science, and upon which they were principally based; and as these theories still exert some influence in the profession it will be necessary to notice them briefly; although the rapid advance made in the sciences soon exploded them as separate systems of medicine.

The first one of these which claims our attention is the

EXPECTANT SCHOOL,

which was founded upon the doctrines of George Ernest Stahl, who was born at Ainspach in 1660 A. D. He studied medicine at the University of Jena, and in 1694 was chosen professor of medicine, anatomy and chemistry at

the newly established University of Halle. In 1716 he was appointed physician to the King of Prussia, and removed to Berlin, where he died in 1734.

Stahl's system seems to have been founded upon a union of a physiological theory, mostly borrowed from Van Helmont, and the psychological doctrines of Descartes.

The gist of the system is that there is a mysterious force which resides in the body, and which is independent of and superior to matter. This force, which he calls the *anima* or *soul*, not only forms the body, but presides over it and directs all its functions, either consciously or unconsciously, and being subject to error by nature, this anima, by abnormal action originates diseases, which are cured by the functional activity of the organs; and further, that this force is sufficient to accomplish said cure without artificial aid. This theory laid the foundation for the expectant plan of treatment, which has exerted a noxious influence in some portions of the medical world ever since its promulgation. His theories were extensively indorsed in some parts of Europe, and continued to govern the practice, especially in France, for a number of years. He held that plethora and anæmia were the principal causes of disease, and that in their treatment art should not be resorted to until after Nature had failed, and even then it should be so used as to fulfill the indications of the latter. The expectant plan of treatment will be referred to in treating of another branch of the subject.

Frederick Hoffman, a contemporary of Stahl, born in the same year (1660 A. D.), and a professor in the same university (Halle), achieved a great reputation as a practitioner and amassed a large fortune, I am sorry to record, a considerable portion of which was from the sale of secret remedies. The system of Hoffman was rather vague and indefinite, and was based upon the supposed influence which the nervous system exerts in the production of disease, coupled to which was a humoral pathology, some form of which seemed to prevail almost everywhere at that time. His greatest work, which he was twenty years in preparing, was published at Halle, in 1740, in nine volumes, under the title of *A Rational System of Medicine.*

Neither one of the preceding professors exerted such a powerful influence, however, as Hermann Boerhaave, one of the most celebrated physicians of the eighteenth century. He was born at Voorhout, near Leyden, in 1668 A.D. He received a classical education, with a view of becoming a clergyman. He was master of the Greek, Latin and Hebrew languages, together with their literature. He received his degree of Doctor of Philosophy at the age of twenty-one years, and began the study of medicine, reading carefully the works of Hippocrates from among the ancients, and Sydenham among the moderns. He received his Doctor's degree at Harderwyck, at the age of twenty-four years, and returned to Leyden, where, at the age of twenty-nine years, he was

appointed lecturer on the Theory of Medicine. At different times he filled the chairs of Chemistry, Botany, and Practical Medicine, enriching them all in turn. He published several works in which his system is explained. He contributed extensively toward establishing what is familiarly known to all physicians as the Humoral Pathology, and is ingeniously compounded from physics, chemistry and physiology. As this system is familiar to almost everybody, it is dismissed without further notice.

Boerhaave achieved greater fame during his lifetime than usually falls to the lot of man. The celebrity of philosophers, poets, authors and artists is frequently posthumous; but Boerhaave, long prior to his death, was celebrated as a great physician all over the civilized world. Peter the Great of Russia is said to have been at one time his patient. A Chinese mandarin addressed a letter to "*Herr Boerhaave, Celebrated Physician, Europe,*" which in due time was received by him.

The three preceding systems were founded upon the imperfect knowledge of physiology existing at the time, and as rapid advances were made during this historical period in this science, they were soon modified or superseded by other systems more in harmony with the improved condition of the science; and especially was this the case after the publication of Haller's great work on Human Physiology (1757-1766).

William Cullen, one of the most celebrated physicians

of the last century, was born at Lanarkshire, in 1710 A.D. He was educated at the University of Glasgow, and studied medicine with Dr. Paisley, a very highly educated and liberal-minded man, who possessed a valuable library, of which young Cullen doubtless made good use. He was also the friend and companion of Dr. William Hunter, they having spent three years under the same roof. He graduated in Medicine at Glasgow, in 1741. He was a close student and an untiring laborer in his profession during his whole life. He lectured upon the various subjects connected with medicine for several years, at the Glasgow University, until he was called to Edinburgh, to accept a position in the faculty of that University. He filled several positions in the faculty of this institution at different times, but was not advanced to the one he was best qualified to adorn until 1773, when he was chosen professor of theory and practice. He died in 1790.

In Cullen's time the medical world was distracted by the prevailing systems of Stahl, Hoffman and Boerhaave. Not being satisfied with either, he proceeded to inaugurate a system of his own, which was compounded from Haller's theory of irritability and Hoffman's theory of nervous influence in the production of disease. His principal objection to Stahl's system was on account of the expectant practice which it encouraged. Yet he placed a very high estimate upon the *Vis Medicatrix Naturæ,* which is the same thing, viewed from a different

standpoint, as Stahl's *Anima* or *Rational Soul*, or Hoffman's *Nervous Influence*, or the *Animal Spirits* of Galen, and the principle called *Nature* by Hippocrates.

John Brown, the founder of the Brunonian system of medicine, was born in Bunkle Parish, Berwickshire, in 1735 A.D., and was educated at the grammar-school of Dunse. He studied medicine at the University of Edinburgh, and was for a number of years tutor to the children of the famous Dr. Cullen, and also his assistant in his course of lectures at the University. He became highly offended at some imaginary slight put upon him by Cullen, and immediately began lecturing upon a new system of medicine of his own.

Brown's system was founded upon what he called "*Excitability*," which he did not attempt to explain. He regarded man as a kind of machine which responded to certain stimulants, and, consequently, life was a forced condition. He divided diseases into two great classes: those of a *sthenic* and those of an *asthenic* character, the former of which were to be treated with depressing remedies, and the latter with stimulants. This was equivalent to opening up another royal road to the study of medicine, which bid fair to eclipse that of the ancient Methodics, who boasted of their ability to teach the whole art in six months.

The only thing required in Brown's system was for a practitioner to be able to decide to which class of diseases his cases belonged, and treat them accordingly. And

as nearly all diseases were considered as asthenic, and consequently required stimulants, the treatment was indorsed generally by the patient, because it gratified his appetite. Such a system will always find followers in the profession, because it encourages indolence and requires little hard study. Brown was an attractive lecturer, and gained a considerable following in a very short time; but his course was essentially meteoric, a brilliant flash across the medical horizon, followed by death in darkness. He died in London, of intemperance, in 1788.

CHAPTER XI.

Concluding Remarks on Ancient Dogmatism—Medicine and Philosophy—Materia Medica of the Ancients.

From the earliest period of which we have any knowledge of medicine down to the close of the eighteenth century, certain prominent characters have attempted to formulate general principles upon which to base systems which it was hoped would be sufficient to explain all the various phenomena connected therewith, and at the same time furnish indications upon which the treatment of all diseases might be based. This gave rise to the various sects, schools or systems in medicine which have appeared from time to time in its history, beginning with the Dogmatic, 400 B.C., and ending with the Brunonian, about the close of the eighteenth century A.D.

After the failure of Brown's system no further attempt was made to establish a school of medicine upon any specific dogma, with the exception of several minor systems of quackery. With the death of dogmatism begins the Rational age in the history of medicine. A very brief summary of the principles upon which the various ancient dogmatic schools were founded has been given, without any discussion of the contemporaneous systems of philosophy upon which they are based.

Medicine, during this entire period, was continually

shifting its features, in order to conform as nearly as possible to the prevailing systems of philosophy.

I have also avoided as much as possible the discussion of the materia medica of the ancients or their treatment of special diseases, which in many instances was peculiarly absurd, or even disgusting, and of no particular interest, only to the antiquarian. All kinds of substances were used as medicines, animal, vegetable and mineral. Those drawn from the animal kingdom form the most disgusting portion of the materia medica, which consisted of the flesh of lizards, crocodiles, vipers, the brains of wolves, the heads of mice, the bodies of moles, the livers, lungs, blood and organs of generation of animals, etc. This would not have been so bad, but they used the excrements of various animals, both internally and externally. The entire bodies of patients were frequently anointed with cow-manure, for numerous diseases; and poultices of mashed spiders were bound to the temples; and the heart of the hare was worn upon the back of the neck, for the cure of malarious intermittents. However disgusting and irrational these external applications may appear to the intelligent people of to-day, they were doubtless as effective in relieving disease as the patent plasters and absorbing liver pads which are patronized by the idiots of the present generation. Newly-born puppies were boiled and eaten, for the purpose of preserving the patient from attacks of colic during the remainder of his days, and a great many similar absurdi-

ties. Yet it will be seen, by consulting some of their earliest works on this subject, that the ancients were not deficient in materials for use in medicine. Theophrastus, who was a pupil and contemporary of both Plato and Aristotle, and president of the Lyceum at Athens for thirty-five years, was the author of eighteen books relating to the various departments of botany, and is the first of the ancients whose works on this subject have been transmitted to us. They are more valuable, however, to the botanist than the physician. He died at Athens (287 B.C.), at the advanced age of one hundred and seven years.

The most valuable work of the ancients upon the subject, and from which nearly all subsequent authors have copied largely, is that of Dioscorides, who is supposed to have flourished in the first or second century, A.D. He accompanied the Roman armies as physician, on many of their campaigns, during which time he collected a great store of information upon the medicinal qualities of plants, which he afterwards composed into a work on materia medica. This work formed the real foundation of the science, and has been accepted as such for nearly fifteen centuries. He enumerated in his work on this subject 958 articles which were used as medicines. This is more than double the number of officinal preparations now in use. Of these substances, 700 were plants, 90 were composed of minerals, and 168 were drawn from the animal kingdom.

The Arabian physicians followed Dioscorides closely, his works having been translated into their language.

Rhazes describes in his writings 765 articles of the materia medica, and Avicenna about 750, but Eben Baithar expands his materials until the number reached 1400. This would simply be appalling to a modern student of medicine. The number of articles used in medicine has been curtailed materially in modern times. Many substances upon which the ancients placed great value have been ascertained to be almost inert, while others are now considered valuable as articles of food, which were formerly used as medicines only. In this way the number of the materials used has been lessened greatly and about everything of little or no value has been weeded out, while it is to be hoped that everything of much consequence has been retained.

Some few medicines of great value have been handed down from the ancient Egyptians, who used them, without doubt, before the beginning of the historical period. The Arabians contributed several valuable articles to the materia medica, which will continue to be used as long as the science exists. In fact, this department has been enriched all along the line. What seems to us most absurd was the peculiar manner in which the ancients compounded their medicines, under the general name of antidotes, which were composed of numerous ingredients mixed together, apparently without any view to their specific action, and of which almost every practitioner

seems to have concocted one for himself, which he prescribed for almost every diseased condition. This was particularly the case with the celebrated composition, called Theriac, which consisted of nearly one hundred and fifty ingredients, even a list of which would be too long for this essay, without describing the method of compounding it. I must say, however, that four or five vipers entered into this composition, and that they had to be of a tawny color, recently taken, and after their heads had been removed and four finger-breadths cut from their tails, to be boiled, after removing the skin and entrails, until the flesh dropped from the bones, before they were ready to be mixed with the other ingredients. After this preparation had been compounded according to the directions, which I have not quoted, for want of space, it was to be laid up in silver or glass vessels, not quite full, and the covers taken off every day. In case of great emergency, when a person had been bitten by a venomous animal, or taken poison of any sort, or in case any pestilential disease made its appearance, this medicine will have acquired sufficient virtues to be used in seven years after it is compounded; but in all other cases it will not have matured sufficiently for use until ten years have elapsed; and it is said to retain its virtues for a period of forty years.

This celebrated medicine was not dropped from the British Pharmacopœia until about one hundred and twenty-five years ago, and then it was rejected by one majority

only, in a vote of twenty-seven. There was an immense number of these antidotes in use, one authority, Myrepsus, giving formulæ for compounding over five hundred of them. None of them, however, contained as many ingredients as the Theriac.

CHAPTER XII.

Homœopathy, as Taught by Hahnemann.

The principles of the various ancient dogmatic systems of medicine, with few exceptions, were adopted and taught by the contemporary schools and colleges. The progress of medicine was essentially slow; its strides were centennial, it required centuries to abolish an error or institute a reform. The Dogmatic school, which was formed by the immediate followers of Hippocrates, about the year 400 B.C., was without a rival for 113 years, when the Empiric school was instituted by Philinus and his disciples, 287 B.C. This school divided the honors and emoluments of the profession with the Dogmatics until about the middle of the century immediately preceding the Christian era; then arose the Methodics, which, with its subdivisions, the Eclectics and Pneumatics, together with the two former, continued to flourish until the coming of Galen, who was born 131 A.D.

Galen revived and revised Dogmatism, and impressed it so firmly upon the medical world, that it required fifteen centuries to loosen its shackles. The more modern schools, owing to the revival of letters and the advancement made in the science of physiology and chemistry, were short-lived. The systems of Stahl, Hoffman, Boerhaave, Cullen and Brown soon melted away

under the influence of our better knowledge of these sciences, and no further attempts to establish a system upon the basis of a specific dogma ever had any extensive following in, or succeeded in capturing the medical department of, any college or university; and although homœopathy, which was founded by Hahnemann in the earlier years of the present century, had a considerable number of adherents, it never succeeded in gaining a foothold in any of the universities. Nearly a quarter of a century elapsed before it was introduced into this country; its progress at first was rather slow; but it has at present among its disciples numerous and respectable teachers and practitioners, who are highly cultured gentlemen, and who have established schools and hospitals in all the principal cities in the Union.

For a long time homœopathy was assailed by ridicule only, by the regular medical profession; yet it has continued to thrive upon it. However, the illusion, for such it is, is entitled to more serious consideration; its fallacies ought to be met and discussed according to the ordinary rules applied to scientific investigations. This I propose to do, by first showing what homœopathy was, as taught by Hahnemann, with the scientific objections thereto; and secondly, what homœopathy is now. This plan will necessarily give rise to some repetition, but as little will be indulged in as is compatible with a full statement and discussion of the subject. Homœopathy, although originally a strictly Dogmatic school, with

certain fixed principles promulgated by Hahnemann, is now divided into several different sects, about as follows: 1st. Pure homœopathists, who believe that the law of similars is the only therapeutic law, and that high dilutions and triturations, which have been properly dynamized, constitute the only proper medicines to be used. 2d. Those who believe that the law of similars is the only law, but use either high or low dilutions. 3d. Those who believe that the law of similars is not universal, although a law, and consequently use high and low dilutions, and occasionally doses of the crude drugs.

Samuel Hahnemann, the originator of the Homœopathic school of medicine, was born at Meissen, a small village near Dresden, the capital of Saxony, in 1755 A.D. His father designed him to follow the same occupation as himself, he being a painter of Dresden china; but young Hahnemann displayed such an ardent desire for letters that this design was abandoned, and he was permitted to attend the small college of his native village gratuitously, until he was twenty years of age. He then went to Leipsic, taking his entire fortune, which consisted of forty crowns, with him, where he began the study of medicine. He not only paid his entire expense while at this place, by translating Latin, French and English works into German, but actually saved enough to enable him to visit Vienna, where he completed his medical studies. He returned to Dresden in 1784, where he remained for five years, being a portion of the time in

charge of a large hospital. In 1789 he returned to Leipsic. In 1790 he translated Cullen's Materia Medica from the English into the German, and while engaged in this translation he was struck with the insufficiency of the explanations of the *modus operandi* of cinchona bark in curing ague, and it occurred to him to take a large dose, in order to see what the effect would be on the healthy body. In a few days he had well marked symptoms of ague; and he concluded that the reason why cinchona cures ague is, because it has the power to produce symptoms in a healthy person similar to those of ague. Hahnemann spent several years in studying and elaborating this subject, and, in 1797, published an article in *Hufeland's Journal,* proposing to apply this principle to the discovery of the proper medicine for every form of disease. He published, in 1808, his great work, the Organon, which has been translated into all the European languages and also the Arabic. The principles of homœopathy are fully explained in this book.

From 1810 to 1821 he was engaged in publishing his works on materia medica, giving descriptions of the action of medicines upon persons in health.

The homœopathic system requires the administration of medicines singly, or but one remedy at a time, and in very minute doses. This was against the interest of the apothecaries, and they prosecuted him, under the law which forbade physicians dispensing their own medicines, and he was compelled to leave Leipsic.

By special invitation of the Grand Duke of Anhalt-Köthen, in 1821 he took up his residence at Köthen, where he continued to reside for fourteen years. While at this place he prepared several new volumes of his Organon and works on materia medica. In 1835 he removed to Paris, where he enjoyed a great reputation until his death, which occurred in 1843.

"*Similia similibus curantur*," or diseases are cured by remedies which have the power of exciting a similar train of symptoms in the healthy body to the disease to be treated, is the leading principle of homœopathy. The law of similars requires that only one medicine shall be administered at a time, and not until it has been proven; *i.e.* thoroughly tested by being administered to a healthy pharmacometer, and the symptoms produced thereby carefully noted. This originally was all there was of homœopathy, Hahnemann having promulgated this law of similars, and put it into practice by way of experiment, several years before he saw the necessity of infinitesimal doses. He was soon convinced that remedies administered in sensible quantities, according to this law, usually coincided with the disease, and in place of benefiting the patient nearly always aggravated the symptoms. In fact, it was taught afterward by Hahnemann, and is the accepted doctrine of pure homœopathists, that a well chosen remedy of the thirtieth attenuation is capable of producing aggravations. This statement is clearly proven by reports of his own cases, one of which

is of particular interest, and was reported in *Hufeland's Journal*, in 1797. This was a case of cholera morbus, for which he prescribed veratrum album, a drug which has a violent emeto-cathartic action, and, of course, coincided with and aggravated the disease; but the patient reacted, and actually recovered, triumphing over both disease and maltreatment. But Hahnemann, with that strange inconsistency with which many of his conclusions are characterized, regarded, or pretended to regard, the result in this case a complete vindication of the law of similars.

When this case was reported he had been elaborating and perfecting this system for about seven years, and had gone too far to recede. He had staked his all on the truth of the proposition, "Similia similibus curantur." To retreat was impossible. He was compelled to move forward, but had to add a new principle; and thus came about high dilutions and triturations. This principle is not one of the results growing out of his spirit-like dynamic pathology; that was an afterthought, and manufactured in order to comply with the transcendental basis of his therapeutics; a sort of logical necessity. The law of similars had been promulgated several years before, but experience and observation had taught him that medicine could not be prescribed in sensible quantities in accordance with this law. Hence the attenuations followed.

It has been the rule with all schools of medicine, and will continue to be so for all time, that the therapeutical

application of remedies is based upon the pathological conditions known to be, or supposed to be, present in the case to be treated. Hahnemann having announced his law of similars, and in accordance therewith having been forced into high dilutions and triturations, and recognizing the absurdity of treating the material pathological changes which take place in diseases with such attenuated remedies, was compelled, I repeat, to manufacture an attenuated pathology, which is explained in the Organon about as follows:—

Disease consists of a disordered condition of the vital, spirit-like, or dynamic force of the body, which manifests itself by certain disordered sensations or symptoms, the totality of which constitutes the disease or thing to be treated.

Thus it will be seen that Hahnemann elevated his pathology above anything material, and placed it upon the same dynamic plane occupied by his therapeutics. This transcendental pathology is emphatically insisted upon in the Organon, as we will show by a few quotations from Wesselhœft's translation of Hahnemann's principal work, which is the one used in the preparation of this essay.

" . . . . . Diseases will not cease to be (spiritual) *dynamic aberrations of our spirit-like life, manifested by sensations and actions; that is, they will not cease, for the sake of those foolish and groundless hypotheses, to be immaterial modifications of our sensorial condition* (health). These causes of our diseases cannot be material ones. . . . . . (What nosologist ever

beheld with bodily eyes such morbific matter, that he should speak so confidently of it, and make it the basis of a medical procedure?) . . . . . Even if some material substance, brought in contact with the skin or a wound, had propagated diseases by infection, who can prove (as has often been asserted in our works on pathogeny) that some material particle of that substance had mingled with, or had been absorbed by, the juices of our body? . . . . . ."

"Is it possible to admit the existence of material morbific matter and its transition into the blood in this and all such cases? A letter written in the sick room, and sent a great distance, has often imparted to the recipient the same miasmatic disease. Can material morbific matter be thought of in this case as having permeated the humors of the body?"

". . . . . That no disease (unless occasioned by entirely indigestible or other hurtful matter, swallowed or lodged in the primæ viæ or other apertures and cavities of the body, or caused, *e. g.*, by a foreign substance penetrating the skin) can be derived from the presence of any material substance, but that each disease is always and only a special, virtual and dynamical discordancy of our sensorial condition (health). . . "*

"In sickness this spirit-like, self-acting (automatic) vital force, omnipresent in the organism, is alone primarily deranged by the dynamic influence of some morbific agency inimical to life. Only this abnormally modified vital force can excite morbid sensations in the organism, and determine the abnormal functional activity which we call disease. This force, itself invisible, becomes perceptible only through its effects upon the organism, makes known, and has no other way of making known, its morbid disturbance to the observer and physician than by the manifestation of morbid feelings and functions; that is, *by symptoms of disease* in the visible material organism. . . . . ."†

* Pages 23, 24 and 25 of the Organon. † Page 68 of the Organon.

"§ 12. Diseases are produced only by the morbidly disturbed vital force. . . . . .

"§ 13. Hence, disease (not subject to the manual skill of surgery), considered by allopathists as a material thing hidden within, but distinct from, the living whole (the organism and its life-giving vital force), is a nonentity, however subtile it is thought to be."*

Hahnemann and his followers attached so much importance to their belief in the nonentity of disease, that they attempted to obliterate the nomenclature of disease as used by the physicians of former times, and in speaking of any particular case they would not say the patient had the rheumatism, gout or typhoid fever, but would proceed to enumerate the "totality of symptoms" as manifested by the disordered sensations in the case, as the proper thing to do.

Hahnemann discouraged investigations with a view of ascertaining the causes of disease, and even ridiculed the older physicians for efforts made in that direction, saying: "They fancied they could find the cause of disease, but they did not find it, because it is unrecognizable and not to be found, since by far the greater number of diseases are of a dynamic (spirit-like) origin and nature; their cause, therefore, remaining unrecognizable." He also, in the same paragraph, reproves the old school physicians for studying practical and pathological anatomy, as well as physiology, and censures them for the conclusions drawn from a study of the subject, thus indi-

* Page 68 of the Organon.

cating rather plainly that he did not approve of the study of those necessary branches of medicine, which is perfectly consistent with his views of the nature of disease; for if disease consists of disordered vital force, and is to be prescribed for simply in accordance with the totality of symptoms, a knowledge of these branches is certainly not necessary.

"SIMILIA SIMILIBUS CURANTUR."

In order to effect a homœopathic cure an artificial drug-disease must be substituted, which must be similar to but stronger than the natural disease. This artificial affection, after overcoming the natural disease, will itself yield to the vital force, and thus leave the organism free from disease. This law is crystallized into the expression "Similia similibus curantur," and is considered by homœopathists as the most important principle upon which their system is founded.

Before a medicine can be prescribed in accordance with the law of similars, it is necessary that it should be proved. For this purpose the article to be tested is administered to perfectly healthy persons, who are to observe a carefully prescribed diet and regimen during the process, and observe carefully all the pathogenetic symptoms which appear while under its influence.

DILUTIONS.

High dilutions and triturations also form an important part of the principles of homœopathy, and are rendered necessary because medicines prescribed in sensible quan-

tities, according to the law of similars, always produce an aggravation of the symptoms in direct proportions to the quantity administered.

"Although a homœopathically selected remedy, by virtue of its fitness and minuteness of dose, quietly cancels or extinguishes an analogous disease, without manifesting any of its unhomœopathic symptoms—that is to say, without exciting additional perceptible sensations—it will, nevertheless, as a rule (or in the course of a few hours) produce a slight aggravation, resembling the original disease so closely that the patient actually considers it as such. . . . . ."*

"§ 158. This slight homœopathic aggravation during the first hours is quite in order, and in case of an acute disease, generally serves as an excellent indication that it will yield to the first dose. The drug-disease must naturally be somewhat more intense, in order to overcome and extinguish the natural diseases; so it is only by superior intensity that one natural disease can extinguish another of similar nature."†

"§ 159. The smaller the dose of the homœopathic remedy, so much the smaller and shorter is the apparent aggravation of the disease during the first hours."‡

"A physician accustomed to close observation will experience no great difficulty in distinguishing aggravation from improvement."

It is claimed by Hahnemann and his followers that during the process of dilution, trituration and agitation, these medicines so treated have imparted to them a dynamic power or force which is not possessed by them as material agents, and that this potentiality is increased by the number of shakings, as well as the dilutions.

"Desirous of employing a certain rule for the devel-

* Page 139 of the Organon. † Page 140 of the Organon.
‡ Page 174 of the Organon.

opment of powers of fluid medicines, I have been led by manifold experiences and accurate observations to prefer two instead of repeated strokes of succussion for each vial, since the latter method tended to potentiate the medicines too highly. . . . . I dissolved one grain of soda in half an ounce (1 Loth.) of water mixed with a little alcohol contained in a vial, two-thirds of which it filled; after shaking this solution uninterruptedly for half an hour, it was equal in potentiation and efficacy to the thirtieth development of strength." *

It is conceded by Hahnemann that these medicines act by their dynamic power only, and not as physical or chemical agencies, and that diseases, being of a spirit-like nature, cannot be reached in any other way than by a dynamic force.

"Our vital force, that spirit-like dynamis, cannot be reached nor affected except by a spirit-like (dynamic) process, resulting from the hurtful influences of hostile agencies from the outer world acting upon the healthy organism, and disturbing the harmonious process of life. Neither can the physician free the vital force from any of these morbid disturbances, *i. e.*, diseases, except likewise by spirit-like (dynamic, virtual) alterative powers of the appropriate remedies acting upon our spirit-like vital force." †

These dilutions are prepared as follows: A strong solution is first made, called the "*mother tincture.*" One drop of this tincture is agitated with ninety-nine drops of alcohol, which is called the first dilution, and marked *No.* 1. One drop of this *number one* dilution is again agitated with ninety-nine drops of alcohol and marked *No.* 2,

* Page 221 of the Organon. † Page 69 of the Organon.

and so on up to the 30th, which is the highest power recommended by Hahnemann, although some of his followers have continued them to the 1000th potency.

Great care must be used in the preparation of dilutions, or their dynamic force will be increased so as to render their use dangerous. Hahnemann recommended that they should be shaken but twice, while some of his disciples use twelve powerful strokes.

"Finding that our 30th gave good satisfaction to physicians, we concluded to make in like manner High Potencies, that is, prepare them by hand, with pure alcohol, giving each potency twelve powerful strokes. We have thus carried up over 250 remedies to the 200th, 150 to the 500th, and 100 to the 1000th potency." *

"Finding a bottle of the 29th dilution of Plumb, ac. dried up, the cork loose and dry, the idea occurred to him (Jenichen) to potentize from the bottle up to the 200th. A patient affected with hereditary fetid perspiration of the feet, smelt once of a few globules saturated with this potency, and in a few days was permanently cured. (Rentsch.)"

"Dr. Hering, who is the acknowledged authority on this point, confirms this statement of Rentsch, and explains further that the high potencies, *i. e.*, up to 800, are made in bottles four and a half inches long and weighing one-half ounce. Each potency gets twelve strokes. The highest potencies—from 900 upward—are made in bottles weighing eighteen ounces, including the contents. Each potency gets thirty strokes. The vehicle used is the water of Lake Schwerin. . . His regular proportion of medicine to vehicle for the high potencies is 1–300, for the highest potencies 2–1200. Ever since Jenichen had found the Plumb. ac.^{200} (made from the dried-up bottle of Plumb. ac.^{29}) so efficient in

* From Boerick & Tafel's Catalogue and Price Current.

the cure of offensive foot-sweat, he made all the high potencies of the earths and minerals, as also some others, from evaporated phials." *

"In addition to this, it must be remembered that the power of homœopathic medicine is augmented (potentiated) by friction and succussion at each successive division and comminution. This development of powers, unknown before my time, is so great, that in latter years convincing experience has led me to make use of two succussions after each dilution, where formerly I employed *ten*." †

The strength of these dilutions is as follows :—

No. 1 contains the one hundredth part of a drop. No. 2 the one ten thousandth part of a drop. No. 3 the one millionth part of a drop. No. 6, the one billionth; and No. 30, the one decillionth part of a drop.

If the substance is insoluble it is to be treated as follows :—

One grain of the substance is to be triturated with ninety-nine grains of sugar of milk and marked No. 1. And in the same manner one grain of No. 1 is to be triturated with ninety-nine grains of sugar of milk, in order to form trituration No. 2; and so on up to trituration No. 5 or 6, when, according to a supposed new chemical law claimed to have been discovered by Hahnemann, all substances become soluble, and the attenuations are continued by dilutions in alcohol, as in the case of the mother tincture.

Minute pellets of sugar of milk are saturated with

* *Medical Counsellor, Chicago, April*, 1880.
† Page 222 of the Organon.

these solutions, varying in strength from the one hundredth to the decillionth part of a drop or grain. This constitutes the armamentarium of the homœopathic physician as he goes out to conquer the world of disease.

As thin as these solutions and triturations seem to be, and as little account as they are known to be as physical forces, to all scientists, the patient does not always receive the full effect, if any, that might be derived from their proper administration, for they are sometimes administered by olfaction, even for the cure of the most inveterate diseases, as will be shown by the following:—

"In case of a sudden derangement of the stomach, marked by constant and offensive eructations, tasting of tainted food, and usually accompanied by depression of spirits, cold hands and feet, the efforts of the ordinary practitioner have been directed altogether against the vitiated contents of the stomach, using active emetics to effect their complete expulsion." *

After criticising this practice severely, he says further:

"But, if in the place of using such powerful and injurious evacuants, the patient will apply but once, by olfaction, the highly diluted juice of pulsatilla (smelling of a globule no larger than a mustard seed, moistened with the same), it will relieve the derangement of his condition in general, and that of his stomach in particular, and restore him in two hours. †

"[149] § 288. Homœopathic remedies will act with the greatest certainty and efficacy, particularly by smelling or inhaling them in the form of vapor emanating continually from a dry pellet impregnated with a highly rarefied medicinal solution, and contained in a small vial. The homœopathic physician should apply the

* Page 48 of the Organon.

† Page 224 of the Organon.

mouth of the vial first to one nostril of the patient, and request him to inhale the air from the vial; and if the dose is to be somewhat stronger, the vial should also be applied to the other nostril, the patient inhaling more or less vigorously, in proportion to the intended strength of the dose, whereupon the vial should be replaced, well-corked, in his pocket-case, to prevent abuse. *Hence the physician may dispense entirely with the services of an apothecary, if he chooses to do so.* Globules (of which ten, twenty or a hundred weigh a grain) moistened with the thirtieth potentiated dilution, and then dried, retain their full strength undiminished for at least eighteen or twenty years (as far as my experience reaches), even if the vial had been opened a thousand times, provided, however, it had been well protected from heat and sunlight. In case the patient's nostrils were obstructed by coryza or polypus, he should inhale through the mouth while holding the aperture of the vial between his lips. A certain result may be obtained in the case of infants by holding the vial close to their nostrils during sleep. The inhaled medicinal vapor comes into immediate contact with the nerves distributed over the parietes of the cavities, through which it passes, and thus stimulates the vital force into curative action in the mildest, but at the same time, in the most energetic manner. This is much superior to all other modes of administering medicines by the mouth. Every kind of internal chronic disease not entirely ruined by allopathy, as well as the most acute diseases that can be cured at all by homœopathy (what, indeed, cannot be cured by it, except surgical diseases requiring manual skill?), are most surely and effectually cured by this process of olfaction. But of the great number of patients who, for a year past, have sought my aid and that of my assistant, there is scarcely one whose chronic or acute disease we had not treated successfully alone by means of olfaction. During the latter half of this year I became convinced of the fact (which I would not have believed before), that by this process of olfaction the power of the medicine is exerted

upon the patient, at least in the same degree of intensity, and, in fact, more quietly, though quite as long as that of a large dose of medicine administered by the mouth, and that, consequently, the process of olfaction is not to be repeated at shorter periods than if the medicine were given in material doses by the mouth. *

"Even patients deprived of their sense of smell are influenced and cured in an equally perfect manner by inhaling medicinal vapor through the nose." †

Although these homœopathic doses are so exceedingly small as to escape the most minute search for their presence, the doctrine is plainly taught in the Organon, that it is derogatory to the best interests of the patient to administer a second dose until after the first has ceased to act, which, in some cases, is a period of several days, as will be shown by foot-note 126, page 213, of the Organon, which we will insert here.

"In the former editions of the *Organon* I have recommended that a single dose of a well-selected homœopathic remedy should be allowed to terminate its operation before the same or a new remedy is repeated, a doctrine derived from the certain experience that the greatest amount of good can scarcely ever be accomplished, particularly in chronic diseases, by a large dose of medicine (a retrogressive measure recently proposed), however well selected; or, what amounts to the same thing, by several small doses administered in rapid succession, because a procedure of this kind will not permit the vital force to undergo imperceptibly the change from the natural disease to the similar drug disease. On the contrary, it is usually excited to violent revulsive action by one large dose, or by the quick succession of several smaller doses, so that the reaction of the vital force, in most cases, is anything but beneficial, doing more harm

* Page 224 of the Organon. † Page 225 of the Organon.

than good. Therefore, while it was impossible to discover a more salutary method than the one proposed by me, it was necessary to obey the philanthropic rule of precaution, *si non juvat, modo ne noceat;* in accordance with which maxim the homœopathic physician, considering human welfare to be his highest aim, was to administer but one most minute dose at a time of a carefully selected medicine in a case of disease, to allow this dose to act upon the patient, and terminate its action. I say *most minute,* since it holds good, and will continue to hold good as an incontrovertible homœopathic rule of cure, that the best dose of the correctly selected medicine will always be the smallest in one of the high potencies (X) for chronic as well as for acute diseases; a truth which is the invaluable property of pure homœopathy, and which will continue to stand as an imperishable barrier to shield true homœopathy from quackery (Afterkünste) as long as allopathy (and no less the practice of the modern mongrel sect composed of a mixture of allopathy and homœopathy) continues like a cancer to undermine the life of suffering men, and to destroy them by large doses of medicine.

"On the other hand, practice proves to us that a single small dose may be sufficient, particularly in light cases of disease, to accomplish nearly all that could, for the present, be expected from the medicine, especially in the case of infants and very tender, susceptible adults. It also becomes evident that in many, nay, in most cases of very protracted and inveterate diseases (often aggravated by previous inappropriate drugs), as well as in serious acute affections, such a minute dose, even of our highly rarefied medicines, will be insufficient to produce all the curative effects that might, in general, be expected to result from the medicine. Hence it may undoubtedly be found necessary to administer several doses of the same medicine for the purpose of altering pathogenetically the vital force to such an extent, and to raise its curative reaction to such a degree of tension, as to enable it to extinguish completely an entire portion of

the original disease, as far as this object could be reached by any well-selected homœopathic remedy. The best selected medicine, in a single small dose, would perhaps bring some relief in such cases, but far from enough.

"A careful homœopathic physician would scarcely dare to repeat the dose of the same remedy again and again, since no advantage was ever gained by such a course, but, on accurate observation, certain disadvantages have most frequently been seen to follow. Exacerbations have been commonly noticed, even after the smallest dose of the most appropriate remedy, whenever it was repeated for two or three successive days.

"A homœopathic physician, convinced of the homœopathic fitness of his chosen remedy, and desirous of relieving his patient in a shorter time than he had hitherto succeeded in doing by means of a single small dose, naturally arrives at the conclusion that, as long as a single dose is to be administered (for reasons detailed above), this dose might as well be increased; and that instead of a single fine pellet moistened with the highest attenuation, six, seven or eight pellets, or even whole drops of the dilution might be given at once. But unexceptionally the result was less favorable than it should have been; often it was actually injurious and detrimental—an evil difficult to repair in a patient treated in that manner.

"Neither will low potencies of the remedy, in large doses, lead to a better result.

"Experience teaches that the desired object will never be gained by increasing the single doses of a homœopathic medicine for the purpose of raising the pathogenetic excitement of the vital force up to the point of sufficient curative action. The vital force would be too violently and too suddenly affected and aroused, than that it could have time to prepare for a gradual, even, and salutary counter-action; hence it endeavors to throw off the surplus of the medicinal assailant by vomiting, diarrhœa, fever, perspiration, etc. Thus the object of the inconsiderate physician is, in a great measure, placed out of

reach, or entirely frustrated. Little or nothing is accomplished toward the cure of the disease; on the contrary, the patient is visibly weakened, and for a long time a repetition, even of the smallest dose of the same remedy, is not to be thought of, lest it should have an undesirable effect upon the patient.

"A number of small doses, repeated for the same purpose in quick succession, will accumulate in the organism till they constitute, as it were, one large dose, and will produce the same evil result, except in some rare instances. The vital force, unable to recover during the interval even between small doses, is overtasked and overpowered, incapacitated to begin curative reaction, and compelled to continue passively the predominant drug-disease forced upon it. This process is similar to that produced by the large and accumulating allopathic doses of a drug, resulting in protracted injury to the patient, an event we are daily called upon to witness.

"Now, in order to avoid the errors here pointed out, to gain the desired object with greater certainty than before, and to administer the selected remedy in such a manner that it may do the greatest amount of good to the patient without injury, and finally, in order that, in a given disease, the medicine may accomplish as much as could possibly be expected, I have recently adopted a peculiar course.

"I perceived that, in order to pursue the correct medium course, we should be guided by the nature of the different medicines, as well as by the bodily constitution of the patient, and the magnitude of his disease. Let us take, for example, the use of *Sulphur* in chronic (psoric) diseases; its finest dose (*Tinct. Sulph.* X°), even in the case of robust persons afflicted with developed psora, is rarely to be repeated with advantage oftener than once in seven days; this space of time must be extended still more in the treatment of weakly and susceptible patients, when it will be well to administer such a dose only once in nine, twelve, or fourteen days, to be repeated until the medicine ceases to be serviceable. In such cases it will

be found that in psoric diseases rarely less than four, but often six, eight, and even ten such doses (*Tinct Sulph.* X°), administered successively at such intervals, are required for the complete extinction of that portion of the chronic disease, which sulphur (to continue the example) is capable of extinguishing, provided no allopathic abuse of sulphur had occurred previously. *In this manner, a newly originated (primary) itch-eruption attacking a sufficiently robust person, and even if it had extended over the whole body, can be cured in ten or twelve weeks by administering every seventh day a dose of tinct. sulph. X°* (that is, with ten or twelve globules); nor will it often be necessary to make use of a few doses of carbo veg. X° (also at the rate of one dose a week); the cure may, therefore, be perfected without the least external treatment, excepting frequent change of linen and well-regulated regimen.

"Although from eight to ten doses of tinct. sulph. X° may be generally considered as sufficient in other great chronic diseases, it is, nevertheless, preferable, instead of applying the doses in uninterrupted succession, to give a dose of another medicine which, next to sulphur, is most homœopathic to the case (generally *hep. sulph.*) after each, or after every *second* or *third* dose of the latter; and to allow this new dose to operate from eight to fourteen days before a second series of three doses of sulphur is again resorted to.

"Not infrequently the vital force is indisposed to submit to the action of several successive doses of sulphur, even at the stated intervals, and however well the medicine may have been adapted to the chronic evil, the repugnance of the vital power will be indicated by some moderate sulphur symptoms, which appear during the treatment. In this case it is sometimes advisable to give a small dose of nux vom. X°, and to permit this to act from eight to ten days, so that nature may again become disposed to allow sulphur in continued doses to act quietly and with beneficial result. In some cases pulsatilla X° is to be preferred.

"If sulphur had been allopathically misapplied (even several years before), the vital force will resist the effects of that medicine, though decidedly indicated; in that case even, visible aggravations of the chronic disease will be manifested by the vital force, after the smallest dose of sulphur, nay even after smelling of a pellet moistened with tinct. sulph. X. This is a deplorable circumstance, which renders the best medical treatment almost useless; and still it is only one out of numerous instances of allopathically maltreated chronic diseases, for which, however, we possess some means of reparation.

"In such cases it is merely necessary to let the patient apply one pellet, moistened with mercur. metall. X to his nostrils, and to take a deep inspiration through the nose (stark riechen lassen), and to let this dose, applied through olfaction, operate for nine days, in order to make the vital force again susceptible of the beneficial effects of sulphur (at least by smelling of tinct. sulph. X°, a discovery for which we are indebted to Dr. Griesselich, of Carlsruhe).

"Of the other antipsoric remedies (perhaps excepting *Phoshp.* X) fewer doses are to be given at similar intervals (*Sepia* and *Silicea* are to be given at longer intervals, where they are homœopathically indicated, without intercurrent remedies), in order to distinguish all that the indicated remedy is capable of curing. *Hepar sulph. calc.* is rarely to be administered, internally or by olfaction, in shorter periods than fourteen or fifteen days.

"As a matter of course, the physician should be fully convinced of the accuracy of his selection of the remedy before attempting a repetition of doses.

"In acute diseases the time for the repetition of the proper remedy is regulated by the rate at which the disease runs its course; here it may often be necessary to repeat the medicine in twenty-four, sixteen, twelve, eight, four hours, and less, while the medicine, without originating new complaints, continues to produce uninterrupted improvement; but where this improvement is not sufficiently marked, considering the dangerous

rapidity of the acute disease, the interval must be still further lessened. Thus in cases of cholera, the most rapidly fatal disease known to us, it is necessary in the beginning to give one or two drops of a weak solution of camphor every five minutes, in order to insure speedy and certain relief; while in the more developed stages we may be called upon to employ doses of cuprum, veratrum, phosphorus, etc. (X°), every two or three hours; or to give arsenicum, carbo veg., etc, at similar intervals.

"In the treatment of so-called nervous fevers and other continued fevers, the repetition of the dose of the effective medicine is also governed by the foregoing rules.

"In pure syphilitic diseases I have commonly found one dose of metallic mercury (X°) to be sufficient. But not infrequently two or three doses, administered at intervals of six or eight days, were necessary whenever the least complication with psora was visible.

"In cases where one remedy or another was strongly indicated, but where the patient is very excitable and weak, the application of a remedy by olfaction is more efficacious and safe than the administration of a substantial dose of homœopathic medicine, however fine and highly potentiated. This is done by holding the mouth of the vial, containing one small globule moistened with the medicine, first to one nostril, and if the dose is to be still more efficacious, also to the other nostril of the patient, who takes a momentary inspiration, the effect of which continues quite as long as that of the substantial doses; hence this process of olfaction is not to be repeated at shorter intervals than if the medicine had been given in substantial form."

The absurdity of these remarkable views of Hahnemann in regard to sulphur will be appreciated by those who know that with each meal more sulphur is taken into the system than all the homœopathic physicians in

the world ever prescribed of this remedy when raised to the thirtieth potency.

It is claimed in the Organon, that when the totality of symptoms is removed by treatment the disease is cured:—

"In effecting a cure, the inner change of vital force, forming the basis of disease, that is the totality of disease, is always canceled [8] by removing the entire complex of perceptible signs and disturbances of the disease. Hence it follows that the physician has only to remove the entire complex of symptoms, in order to cancel and obliterate [9] simultaneously the internal change; that is, the morbidly altered vital force, the totality of the disease, in fact, the *disease itself*. . . .

"It is then unquestionably true that, besides the totality of symptoms, it is impossible to discover any other manifestation by which diseases could express their need of relief. Hence it undeniably follows that the totality of symptoms observed in each individual case of disease can be the *only indication* to guide us in the selection of a remedy." *

No reliance was placed on nature by Hahnemann, but the cures effected by him were attributed entirely to the influence of medicinal agents employed. This invaluable force, so highly prized by all rational physicians, was denominated by Hahnemann as "rude" and "instinctive," devoid of reason, and not to be relied upon.

"How could the old school, calling itself rational, be justified in choosing this unintelligent vital force, this blind guide, as its best instructor in an office of such high importance as that of healing, requiring so much thought and power of judgment? How dared it imitate, without hesitation, all those indirect and revolution-

* Page 70 of the Organon.

ary processes inaugurated in diseases by that vital force, and copy them as if they were the *non plus ultra*, the best that reason could devise? Did not God grant us his noblest gift, reflecting reason and unfettered power of deliberation, in order that we might, for the benefit of mankind, surpass immeasurably the effort of the unguided vital power in bringing relief?

"If, therefore, the ordinary school of medicine, in its rash imitation of crude, unreasonable, automatic vital energy, etc." *

In fact, the efforts of nature were regarded by Hahnemann as the disease itself.

"He does not perceive that all the above-named local symptoms, evacuations, and apparent derivative actions (begun and supported by the unthinking, unguided vital force in conquering the original chronic disease) are in fact the disease itself, ...

"Since the crude efforts of nature for attaining relief in acute, and more particularly in chronic diseases, are extremely imperfect and in themselves a disease, ... and still less was that vital force given to us that its imperfect and morbid efforts (to rescue itself from disease) might be imitated.

"What man of sense would undertake to imitate nature in her endeavors of coming to the rescue? Those efforts are, in fact, the disease itself; and the morbidly affected vital force is the producer of disease becoming manifest. Necessarily, therefore, every artificial imitation as well as the suppression of these natural efforts must either increase the evil, or render it dangerous by suppression; the allopathist does both, and then extols this practice as healing art, as 'rational' healing art!

"He is in the wrong. *That noble innate power, destined to govern life in the most perfect manner during health*, equally present in all parts of the organism, in the sensitive as well as in the irritable fibre; that untir-

* Page 28 of the Organon.

ing mainspring of all normal, natural, bodily functions, was never created for the purpose of aiding itself in diseases, nor to exercise a healing art worthy of imitation." *

Thus it will be seen that the most valuable aid to the physician, the forces of nature, the so-called "Vis medicatrix naturæ," is entirely ignored by Hahnemann and his followers; and all recoveries under their treatment are ascribed to their diluted therapeutics.

Hahnemann also denounced the use of local remedies, claiming that all local diseases are only symptoms, or indications of disease of the general system, and that the proper way to remedy them was by the internal administration of the properly selected homœopathic medicine; and further, that all local applications were not only of no advantage, but positively hurtful.

"When an old-school physician, acting under the impression that he is curing the whole disease, destroys the local symptom by external remedies, nature will offset it by awakening and extending the inner disease, and all the dormant symptoms which had previously co-existed with the local affection.

"Many kinds of external treatment are in vogue for the removal of local symptoms from the surface of the body, without curing the inner miasmatic disease. It is customary, for instance, to remove the itch from the skin by all kinds of ointments; to destroy chancres externally by cauterization; and locally to exterminate sycotic excrescences by excision, ligature, or the actual cautery. This method of external treatment, hitherto so common, is pernicious in its results." †

"By placing into one class all protracted diseases

* Pages 33 and 34 of the Organon. † Page 154 of the Organon.

arising from unwholesome habits of living, together with countless drug diseases (see § 74) produced by the persistent and debilitating treatment often employed by old-school physicians in trifling disorders, we shall then find that all other chronic diseases, without exception, are derived from the development of three chronic miasms, internal syphilis, internal sycosis, but chiefly and in far greater proportion, internal psora. Each of these must have pervaded the entire organism, and penetrated all its parts before the primary representative local symptom peculiar to each miasm (itch eruption of psora, chancre and bubo of syphilis, and condyloid excrescences of sycosis) makes its appearance for the prevention of the inner disease." *

Of these three miasms, psora is regarded as the most important, as will be seen by the following:—

"Before beginning the treatment of a chronic disease it is necessary to inquire most carefully if the patient had been infected by venereal disease, or by sycotic gonorrhœa. In either case the treatment should be directed against the affection whose symptoms are alone found to be present; although it is rare in modern times to meet with uncomplicated cases of these affections. If such an infection is acknowledged by the patient, it should also be taken into consideration when *psora* is the principal object of treatment, because the latter will have been complicated with the former, a condition always indicated when the symptoms of psora are mingled with others. When a physician is called to treat what he supposes to be an inveterate case of syphilis, he will usually find that it is principally complicated with psora, because the inner itch miasm, or psora, *is by far the most frequent and fundamental cause of chronic diseases*, and is frequently complicated either with syphilis or with sycosis, if infection with the latter has taken place. But in by far the majority of

* Page 145 of the Organon.

cases psora is the sole and fundamental cause of chronic diseases, whatever their names may be, and these are often exaggerated and distorted by allopathic interference." *

The preceding is a fair statement of the principles of homœopathy as announced by Hahnemann in his Organon, and which I propose to discuss in the subsequent chapters of this essay.

* Page 156 of the Organon.

CHAPTER XIII.

Homœopathy Continued.

The forces of nature in their manifold manifestations have engaged the attention of thinking men from time immemorial, and the subject of life, vital force, mind and matter, have been discussed from almost every conceivable standpoint, and they still constitute a fruitful theme for discussion by scientists as well as theologians.

It is not my intention to be drawn into the discussion between the theologian and scientist, or even to review the subject, only so far as may be necessary in criticising Hahnemann's dynamic, spirit-like pathology.

The question as to what influence the so-called vital force exerts in life, in health as well as disease, is one to which we cannot attach too much importance. This subject has attracted the attention of physicians from the earliest known period. I find, in looking over the history of the subject, that Hippocrates placed more reliance upon the forces of nature in the cure of disease, than he did upon his materia medica. He claimed that this force was sufficient for all purposes of the animal economy, and also claimed that it was immortal. The Dogmatic school of medicine, which, as has been stated, was formed by his immediate followers, continued to

propagate his theories upon this, as well as other subjects.

Galen recognized the same force, which he called the animal and vital spirits, and leaves us considerable literature upon the subject.

Stahl, the founder of the Expectant school of medicine, believed the "anima," or soul, superintended the formation and growth of the body, and that the disturbance produced by this force was the cause of disease; so that it will be seen that Hahnemann's pathology was really an infringement upon Stahl's patent.

Both ancient and modern medical literature is filled with speculations upon this subject; and we have Vitalists, Solidists and Humoralists in pathology; but the evident tendency of the modern scientist is toward materialism.

The scientist of the present day believes in the unity of force, *i. e.*, that there is but one force in nature, and that this force emanates from matter, and does not, and *could not exist,* without it; and further, that it is as persistent and as indestructible as matter itself, and that its different manifestations, as light, heat, electricity, etc., are interconvertible terms and mean one and the same thing under different circumstances.

The modern doctrine of the correlation, conservation and unity of force is very generally accepted as true; and if the line of investigation begun by Lockyer is continued as ably as he has begun it, the time may not be far

distant when the unity of matter will also be established.

If, then, we accept the doctrine of unity of force, the question as to the vital force is easily answered. It is simply a manifestation of this universal force which pervades all Nature, as modified by the action and reaction upon itself of the highly organized matter composing our bodies.

Let us begin low down in the scale of life and see how this arrangement will work ; take, for example, the ameboid bodies, that consist of a single microscopic cell. As viewed under the microscope these bodies are among the most simple in structure of all the living organisms, yet they are endowed with sensation and motion, which seems to be the sum of their vitality. They are seen to move, to avoid apparent danger, to pursue and seize their food ; having no mouths they envelop it with their entire bodies, and absorb it in this way. They also make an opening in the cell wall, which serves as an anus, by which the discharge of effete matter is effected ; and they propagate their species by fission, *i. e.*, by breaking into pieces, each one of which develops into a perfect organism like unto the parent cell.

Here, then, we have all the phenomena of organic life performed by a single cell. As we ascend the scale, we find life becoming more complicated, and organized beings are formed by an aggregation of cell elements, and a single cell no longer performs all the necessary functions

of life; but certain cells are set apart for the performance of particular functions, and thus the different organs and tissues of the body are formed. This process has been going on through the countless ages that have rolled by, until we have, as a result of this evolution, man in his present state; his body composed of countless millions of cells, and his vital force consists of the sum of the vital forces of these innumerable cell elements.

The amount of electric force will depend upon the number of cells in a battery; so will the amount of heat and light depend upon the amount of combustible material consumed in a furnace. If the cells in a battery are corroded and filthy and the acid needs replenishing, the quality and quantity of the electricity will be diminished.

So it is with our bodies. If our organs are not in good working order, and our circulating fluids are depraved, our *vital force* will be *lowered, but will not be, and cannot be diseased.* Hahnemann and his followers to the contrary, notwithstanding.

It is impossible for me to have any clear conception of a diseased condition of the vital force. It is not subject to investigation by the scalpel or microscope, or any of the ordinary means by which we investigate diseased structure.

We are able to observe diseased processes in organized matter, both before and after death, but nothing of the kind can be applied to vital force. It is modified solely

by the organs and tissues of the body, and its manifestations will vary in accordance with their condition. Hence, the natural and logical conclusion is, that Hahnemann's spirit-like, dynamic, vital force pathology has no existence, only in the minds of dreaming theorists.

But Hahnemann claims, as shown by previous quotations from the Organon, that causes of disease are also immaterial and dynamic, and he criticises severely the Allopathic school of physicians for searching for their causes.

Viewed in the light of recent science, I should have thought it unnecessary to controvert Hahnemann's views, either in the pathology or the semiology of disease, believing, of course, that those absurd opinions had been abandoned by his more intelligent followers of to-day; but such is not the fact. They still permeate their literature and are taught by their authors.

In the April number of the *Medical Counselor* (a Homœopathic Journal published in Chicago, Illinois), will be found several questions addressed to the profession by the Bureau of Obstetrics of the Homœopathic State Medical Society of New Jersey, in regard to the pathology and treatment of after-pains. These questions are answered by a prominent homœopathic practitioner and author, who takes the ground that these after-pains are caused by an "abnormal condition of the vital force," and that the reason they are not present

in primiparæ and present in multiparæ, is because of the same abnormal condition of the same force.

Many examples could be cited to prove that our brethren of the homœopathic school are still hugging the delusion that disease consists of a "disordered condition of the spirit-like dynamic vital force, etc."

Hahnemann was persistent in advocating the dynamic theory as applied to acute diseases, but shows his inconsistency, or seems to have forgotten himself, in forming his theory for chronic diseases, which he bases upon three chronic miasms; which latter word Webster defines as "Infection floating in the air; the effluvia, or fine particles of any putrefying bodies rising and floating in the atmosphere and considered to be noxious to health; deadly exhalation."

A miasm is certainly a material substance, and is utterly inconsistent with his dynamic theory.

"True, natural chronic diseases are those which owe their origin to a chronic miasm; they constantly extend, and, notwithstanding the most carefully regulated mental and bodily habits, they will never cease to torment their victim with constantly renewed suffering to the end of his life, if left to themselves without the aid of specific remedies for their relief. These are the most numerous, and the source of great suffering to the human race; the most robust constitution, the best of habits, and the greatest energy of unaided vital force are unable to resist them." . . . . . "Hitherto, only syphilis was known to some extent as one of these chronic miasmatic diseases, which, if left uncured will become extinct only with life itself. Sycosis (cauliflower excres-

cences) if left to itself uncured, is likewise inextinguishable by the vital force."

"But psora, as a chronic miasm, is of incomparably greater significance than either of the above-named chronic miasms. While venereal chancre and the cauliflower excrescences mark the internal, specific nature of the two former diseases, psora, after complete infection of the entire organism, indicates its origin from an internal and monstrous chronic miasm, by a peculiar cutaneous eruption, sometimes consisting merely in a few pimples combined with intolerable tickling, voluptuous itching, and specific odor. Psora is the only real, *fundamental cause* and source of all the other countless forms of disease, [70] figuring as peculiar and definite diseases in books on pathology, under the names of nervous debility, hysteria, hypochondriasis, mania, melancholy, idiocy, madness, epilepsy and convulsions of all kinds, softening of the bones (*rachitis*), scoliosis and kyphosis, caries of the bones, cancer, varices, pseudoplasms, gout, hæmorrhoids, icterus and cyanosis, dropsy, amenorrhœa, hæmorrhages from the stomach, nose, lungs, bladder, or uterus; asthma and suppuration of the lungs; impotence and sterility; sick headache (hemicrania); deafness; cataract and glaucoma; renal calculus; paralysis; deficiency of the special senses, and pains of every variety." *

Hahnemann thus classified scabies, or common itch, as a constitutional, psoric disease, and prescribed constitutional treatment only, for its relief; claiming that it could thereby be cured in ten or twelve weeks. †

It is almost universally conceded by rational physicians at this time, that the causes of all the infectious and contagious diseases are material substances which are absorbed into the system, and after a greater or lesser

* Page 109 of the Organon. † See page 116 of this work.

period of incubation, each, according to its kind, excites its peculiar morbid process. One disease germ producing typhoid fever; another, typhus fever; another, scarlet fever; while smallpox, measles, diphtheria, relapsing fever, malarious fevers, the plague, yellow fever, cholera, erysipelas, puerperal fever, and so on, through the entire list of acute infectious diseases, each one being caused by its own specific germ, which produces that particular disease and no other.

Again, who will deny that the chronic infectious diseases, such as syphilis, and hydrophobia, are caused by the absorption of noxious material into the system? The poison from venomous serpents, or the sting of poisonous insects, is a material thing, which goes directly into the circulation. What stronger testimony could be required in controverting the dynamic theory of the causes of diseases.

But again, we have numerous diseases which are caused by the retention in the system of septic material which the emunctories fail to eliminate, and the patient is poisoned by a retention of his own secretions and excretions, or the debris of broken down tissue. In this class may be placed such diseases as rheumatism, gout, jaundice, uræmia, etc., etc.

Prior to the time of Hahnemann the terms allopath, homœopath and antipath were not in common use among physicians. These terms were used by Hahnemann to designate the three principal methods of heal-

ing. The term allopathic was applied by him to the prevailing school of physicians, and according to his definition meant the substitution of a drug-disease dissimilar in nature to the affection to be treated. Homœopathic was used by him to designate his therapeutic law of similars, or the substitution of a drug-disease similar in symptoms to the disease to be prescribed for. Antipathic was used to express the palliative method or opposing contraries by contraries, a method used principally against prominent symptoms—a treatment that was considered the most pernicious of all by Hahnemann, and is still believed so by his followers—the *pure* homœopathists; so much so that they will not prescribe anodynes to relieve violent pain. It is strong proof of Hahnemann's celebrity, that he has succeeded in fastening these names upon the schools, and physicians are now known throughout the civilized world by the names of allopaths and homœopaths.

The law of similars is the chief corner-stone of homœopathy, and will be the last of all their principles that will be abandoned; yet its fate is certainly sealed, and in a few short years it will be numbered with the delusions of the past. It is not claimed by the advocates of this law that medicines have the power of exciting diseases or diseased conditions similar to the ones for which they are prescribed, but simply symptoms or disordered sensorial conditions similar to those present in the case to be treated.

It is of no consequence what pathological condition is present; whether it is an ordinary inflammation, congestion, ulceration, degeneration, tubercle or cancer, the only thing to be considered in selecting the remedy under this law is the totality of symptoms, as may be seen from the following :—

"1st. All that a physician may regard as curable in diseases consists entirely in the complaints of the patient, and the morbid changes of his health perceptible to the senses; that is to say, it consists entirely in the totality of symptoms through which the disease expresses its demand for the appropriate remedy ; while, on the other hand, every fictitious or obscure internal cause and condition, or imaginary, material, morbific matter are not objects of treatment.

"2d. This change of health (discord of feeling) which we call disease can only be changed back (umstimmen) to the normal state by means of medicines, the curative power of which, consequently, consists in their ability to alter the state of feelings ; *i. e.*, in the production of peculiar morbid symptoms, recognized most distinctly and purely by testing these medicines upon the bodies of healthy persons.

"3d. According to experience, natural disease cannot be cured by medicines producing by themselves, in healthy persons, a morbid condition *dissimilar* to and different from that of the disease to be cured. It is, therefore, incurable by allopathic treatment, and even nature herself never cures natural disease by superadding another disease dissimilar to, though of much greater intensity than the first.

"4th. Experience also teaches that only transient relief is procured by medicines inclined to generate in a healthy person an artificial symptom which is the exact opposite of certain symptoms peculiar to the natural disease to be cured. And we also learn that such medi-

cines can never cure an inveterate disease without always creating a subsequent aggravation of the same. On this account this antipathic, palliative process is entirely inappropriate in its application to chronic and serious diseases.

"5th. The only really salutary treatment is that of the *homœopathic* method, according to which the totality of symptoms of a natural disease is combated by a medicine in commensurate dose, capable of creating in the healthy body symptoms most similar to those of the natural disease. And as diseases are only dynamic disturbances of the vital force, they are overcome without additional suffering, and having been perfectly and permanently extinguished, they must cease to exist." *

"All of these observable signs together represent the disease in its full extent; that is, they constitute together the true and only conceivable form of the disease.[2]

"Hence the totality of these symptoms, *this outwardly reflected image of the inner nature of the disease, i. e., of the suffering vital force*, must be the chief or only means of the disease to make known the remedy necessary for its cure, the only means determining the selection of the appropriate remedial agent. In short, the totality of the symptoms must be regarded by the physician as the principal and only condition to be recognized and removed by his art in each case of disease, that it may be cured and converted into health." †

"It is then unquestionably true that, besides the totality of symptoms, it is impossible to discover any other manifestation by which diseases could express their need of relief. Hence it undeniably follows that the totality of symptoms observed in each individual case of disease can be the *only indication* to guide us in the selection of a remedy." ‡

"§ 22. Hence there is no discoverable part that can be removed from a disease for the purpose of restoring health, except the totality of its signs and symptoms." §

* Page 103 of the Organon. † Pages 66 and 67 of the Organon.
‡ Page 70 of the Organon. § Page 72 of the Organon.

So it appears from the preceding quotations, that disease, as considered by the practicing homœopathic physicians, consists of a "totality of symptoms." And under the law of "similia similibus curantur," real pathological conditions are ignored, and many practitioners in that school have confined their studies to a manual of symptomatology and a repertory. It is due our homœopathic brethren, however, to say that many of the members of that school are well versed in the necessary elementary branches of medicine, and possess a high degree of culture in other respects.

As unscientific and irrational as the selection and administration of remedies under this law appears to be, the reasoning is good, compared with the insane idea which Hahnemann entertained in regard to the result.

It has been accepted as a demonstrated fact in all ages, by philosophers, that when a cause is removed the effect will cease; but Hahnemann claims that the converse of this proposition is equally true, and that when the symptoms of a diseased process are canceled by the operation of a homœopathic remedy, the cause will immediately cease to act.

"Diseases are produced only by the morbidly disturbed vital force. . . . . .
It follows that after the cure of such manifestations of disease, and of all discoverable aberrations from healthy vital functions, their disappearance must necessarily and with equal certainty be presumed to result in

and to determine the restoration of the integrity of vital force, and the return of health to the entire organism." *

"In effecting a cure, the inner change of vital force, forming the basis of disease, that is, the totality of disease, is always canceled by removing the entire complex of perceptible signs and disturbances of the disease. Hence it follows that the physician has only to remove the entire complex of symptoms in order to cancel and obliterate simultaneously the internal change; that is, the morbidly altered vital force, the totality of the disease, in fact, the *disease itself*." †

These quotations give a fair example of the reasoning of Hahnemann. Such inconsistencies abound in his writings everywhere, yet he has numerous, respectable and intelligent disciples, and they have numerous patrons who possess good business qualifications in the ordinary vocations of life, however unwise they may be in selecting a physician. Let us hope, for the credit of their intelligence, that they have adopted the system without proper investigation.

Hahnemann claims that this law of similars is a Divine revelation to him, an inestimable boon of God to man, and that the medical world had been groping in darkness until his coming; and he points out several examples where some of his illustrious predecessors had almost caught a glimpse of the great truth, but the privilege of bringing it forth in the full light of day was reserved for him.

The modus operandi by which cures are effected under

* Page 68 of the Organon. † Page 70 of the Organon.

this law is explained by Hahnemann himself in the following words :—

"We have seen *that every disease (not subject to surgery alone) is based upon some particular morbid derangement in the feelings and functions of the vital force; and thus, in the process of a homœopathic cure, by administering a medicinal potency chosen exactly in accordance with the similitude of symptoms, a somewhat stronger, similar, artificial morbid affection is implanted upon the vital power deranged by a natural disease; this artificial affection is substituted, as it were, for the weaker similar natural disease (morbid excitation), against which the instinctive vital force, now only excited to stronger effort by the drug affection, needs only to direct its increased energy; but owing to its brief duration* [13] *it will soon be overcome by the vital force, which, liberated first from the natural disease, and finally from the substituted artificial (drug-) affection, now again finds itself enabled to continue the life of the organism in health.*" *

This explanation is about on a par with that of the schoolboy who said that "although he could not whip Billy Patterson himself, he was able to whip the boy who could."

It is claimed in this paragraph that a medicinal potency (which means any potency between the mother tincture and the thirtieth, or the decillionth of a drop) chosen in exact accordance with a similitude of symptoms has the power of exciting a stronger affection than the natural disease for which it is prescribed, and although the vital force is unable to cope with this natural affection it is entirely competent to remove the stronger drug-disease excited by its action.

* Pages 74 and 75 of the Organon.

This is a fair example of Hahnemann's logic, and it is certainly sufficiently attenuated to suit the most fastidious high dilutionist.

What can be said in reply to such reasoning as I have just cited; or what can be done in the way of criticism or controversion of the doctrines of a school which places its pathology upon such a transcendental plane, which makes the causes of disease immaterial and dynamic, disease itself a nonentity, and bases its therapeutical procedures upon a law supported by such absurd reasons as those referred to.

The law of similars will be further discussed in connection with another branch of the subject.

CHAPTER XIV.

Discussion of Homœopathy Continued.

PROVINGS.

The physiological action of medicines is a subject which has engaged the attention of physicians from the infancy of the science, and is one of great importance. The result of experiment in that direction from time to time has greatly enriched our knowledge of the materia medica, and formed the basis for many valuable therapeutical applications; and due credit must be awarded to our brethren of the homœopathic school for their contributions to this branch of medical science; not, however, without criticism upon their method.

Numerous difficulties surround the experimenter in this business, and obstacles present themselves at every step, when man is used as a pharmacometer. It is almost impossible to find a human being who is entirely free from disease or morbid sensations of some kind. Galen was convinced of this fact as long ago as the second century, A.D., and mentions the fact several times in his writings. Other observers have reached the same conclusion. It is also impossible, in the human subject, to eliminate mental influences. The celebrated John Hunter once remarked that by directing his attention strongly to only one part of his body for a

few minutes he always felt a morbid sensation in that part; and Dr. Carpenter refers to this matter in a paper upon the subject of "Spiritualism and Mesmerism," in which he discusses this subject in a masterly manner, under the head of the "Predominant Idea." This article was recently republished in this country, in the *Popular Science Monthly*, and is well worthy of careful perusal. The difficulty of finding perfectly healthy individuals, the impossibility of eliminating mental and other influences, and the absurd degree to which the homœopaths have continued to record the symptoms, detracts greatly from the value of their provings. The most valuable additions made to our knowledge of the physiological action of medicines are those determined from experiments made upon the lower animals. The number of pathogenetic symptoms ascribed to some remedies is perfectly astounding; thus, nux vomica has one thousand two hundred and nine; carbonate of lime one thousand and ninety; succus sepia one thousand two hundred and forty-two; and so on, for quantity.

Suppose the one thousand and four hundred medicinal substances enumerated in the materia medica of the celebrated Arabian author, Eben Baithar, are all to be tested, and they average one thousand symptoms for each one, making a grand total of one million four hundred thousand to be remembered. This would certainly be appalling to the modern medical student, and the stoutest heart would faint before this ponderous array; yet the

magnitude of the task should never deter scientific men in search of truth.

Beneath this immense amount of rubbish a few grains of truth lie buried; but the task of searching for it is indeed herculean; countless pathogenetic symptoms being ascribed to substances known to be insoluble and inert, such as the unoxidized metals, etc.

Hahnemann claims, however, that by dilutions and triturations these substances become sufficiently attenuated to acquire a dynamic force, and thus the sextillionth part of a grain of carbonate of lime, which is prepared from oyster shells, but also abounds in the ordinary surface water of the country, which we use daily for drinking purposes, will produce over one thousand excitations of our sensorial condition. The ordinary limestone water, in portions of the States of Indiana and Kentucky, contains, in some localities, as much as two hundred grains of lime to the gallon. A person drinking an ordinary gobletful of it would take into his system about ten or twelve grains.

I will enumerate a few of these symptoms, taken from his work on materia medica:—

"In the evening (13 days after taking), on going out, unsteady gait."

"Dizziness on walking out (at the end of 26 days)."

"Sudden deafness immediately after dinner; itching on the border of the eyelids (5 days after taking)."

"Itching at the anterior part of the glans penis after urination (after 28 days)."

"Ardent venereal desire, especially during a walk before dinner (after 17 days)."

"Great heat at the extremity of the big toe (after 21 days)."

"Discharge of blood between the menses, nine days before the period, for two days."

"Hemorrhage from the uterus of an old woman, who had ceased menstruating for many years, in the last quarter of the moon."

"Falls asleep frequently, late in the evening."

"Giddiness from scratching behind the ear."

"The hair of the head comes out, especially in lying-in women."

"Stitches in the ear and temple, going off during rest and when the eyes are closed."

"Alternate buzzing, as of mosquitoes or cracking or breaking of dry straw, in left ear."

"Cracking in ear when chewing."

"Soreness of right nostril."

"Painful pimple in right nostril."

"Smell before the nose, as of rotten eggs, gunpowder or manure."

"Stoppage of the nose by yellow, fetid pus."

These quotations are made at random from the provings of carbonate of lime, and they are made, not for the purpose of ridicule, but in all seriousness; they are fair samples of homœopathic provings. These symptoms are claimed to have been produced by an infinitesimal quantity of this substance, many million

times less than is taken into the system with each goblet of our ordinary drinking water.

In looking over the homœopathic literature of the day we find huge, ponderous volumes filled with this sort of stuff. Allen's "Encyclopedia of Pure Materia Medica" consists of ten volumes, averaging nearly seven hundred pages each. If the nonsensical trash was eliminated one or two volumes would contain everything of value there is in it; but even allowing that nine-tenths of these provings are entirely imaginary, there is still a considerable quantity of valuable information to be carried to the credit side of our therapeutical knowledge, if we had sufficient patience and perseverance to seek for it among all this rubbish.

I have already declared it as my opinion, that the dilutions and triturations of Hahnemann were an outgrowth of the law of similars, and were rendered necessary from the simple fact that medicines could not be prescribed in sensible, *i. e.*, appreciable quantities, under that law, on account of the aggravation that necessarily followed from their administration in such quantities.

I am willing, however, to discuss this portion of the subject from another standpoint, and concede to homœopathy the more consistent position of having its therapeutics based upon its pathology; and I will admit that Hahnemann, after he had placed the cause of disease upon a dynamic plane, entirely above things material,

and also made disease itself consist of a disordered condition of that "spirit-like, dynamic, vital force," saw the necessity of elevating his therapeutics to the same dynamic altitude.

If homœopathists were all agreed in this view of the case, the question could soon be disposed of, because when they conceded that their medicines have a dynamic power only, it would settle the whole question to demonstrate that they have no such power; but they are not agreed upon this point, for many of them claim that their medicines act "physiologically, chemically and mechanically;" consequently this question will have to be discussed from more than one standpoint.

Hahnemann himself says:—

"*Our vital force, that spirit-like dynamis, cannot be reached nor affected except by a spirit-like (dynamic) process, resulting from the hurtful influence of hostile agencies from the outer world acting upon the healthy organism, and disturbing the harmonious process of life. Neither can the physician free the vital force from any of these morbid disturbances, i. e., disease, except likewise by spirit-like (dynamic, virtual) alterative powers of the appropriate remedies acting upon spirit-like vital force.* . . . Thus, healing remedies can and actually do restore health and vital harmony only by virtue of their dynamic action upon the vital force." *

This difference of opinion between Hahnemann and his followers will render it necessary to discuss the question as to whether these triturated and diluted medicines are physical agents or dynamic forces. I think I shall be able to show that they are neither.

* Page 69 of the Organon.

I have already explained the method of preparing these attenuations, and although Hahnemann insists upon their dynamization, he still claims their substantive presence in the highest dilutions, although there is but the decillionth part of a grain in the thirtieth potency. I have performed some chemical and microscopical experiments in order to test the presence of these substances in some of these attenuations. A portion of the preparations used in these experiments was carefully prepared by myself, according to the instructions given by the homœopathic pharmacists; others were prepared at their own pharmaceutical establishments. Without entering into the details of the experiments, I will simply state the results.

1st. In the trituration of insoluble substances no further division or attenuation takes place after the fourth or fifth, as shown by microscopical examination. Neither do they become soluble, as Hahnemann claims, after this degree of attenuation is reached. The most delicate tests known to chemistry fail to disclose their presence in the liquid; but on the contrary, the microscope never failed to find the solid substances in the sediment.

2d. In the examination of the soluble substances, chemical reagents disclosed their presence in the first and second dilutions, in a majority of the preparations tested; but in all above the latter, even the most delicate color-test failed to give any reaction.

This subject is discussed by a writer in the *New England Medical Gazette* (a monthly journal of homœopathy, published in Boston), June number, in the year 1878, under the subject of "The Trituration of Silica." After detailing his observations and experiments with the microscope, his conclusion, in his own words, is as follows:—

"As every one may easily see for himself, by repeating these observations, that the limit of divisibility of the metals is soon reached. As a rule, it does not reach beyond the second trituration."

These observations were made by C. Wesselhœft, M.D., who translated the Organon in 1878. So it will be seen that I have some very good homœopathic authority in confirmation of my own experiments.

These experiments prove conclusively that in the higher dilutions these medicines cannot be present in sufficient quantity to be of any force as physical agencies. The number of particles in any insoluble substance, no further division taking place after the first few triturations, would be exhausted long before the higher potencies were reached. And if dilutions are used after the third trituration, as directed for insoluble substances, they would contain absolutely nothing but the fluid, because of the failure of Hahnemann's law, that "All substances become soluble after the third trituration." These experiments also prove that no dynamic force can be developed by trituration and dilution of an

insoluble substance; for Hahnemann admits himself that dynamization is produced by division and dilution.

It is claimed that in these triturations the division of the medicinal substance is kept up in direct proportion with its admixture with sugar of milk; *i.e.* the number of the particles formed in the first trituration is one hundred times greater in the first, ten thousand times greater in the second, and one million times greater in the third, and so on.

These experiments completely disprove this fallacy, and so far as this portion of homœopathy is concerned, ought to be and *are* sufficient to kill it, even if all the other proofs were wanting. These high potencies by triturations are still manufactured and sold, however, by the homœopathic pharmacists.

The subject of dilutions and triturations, together with the proposed development of a dynamic power by agitation, has always been assailed by ridicule by its opponents, and really no serious arguments have ever been used against it; it having been considered a delusion unworthy of their attention. This is wrong. Homœopathy has a respectable following, both in numbers and intelligence, and consequently is entitled to serious consideration, and its claims must be met and controverted by something in the way of arguments more solid than ridicule.

The question as to whether a dynamic force is developed during the process of dilution, is not so easily

disposed of as the same question applied to trituration; for in that case the division and consequent attenuation necessary to produce it (as claimed by Hahnemann) does not take place; but during the process of dilution the attenuation does take place; but does it, or can it create or develop a dynamic power not resident in the matter itself?

This is the great question in homœopathy. The whole system hinges upon the truth or fallacy of this proposition; for if these dilutions have no effect as physical agents, and this dynamic power is not developed, the law of "Similia similibus curantur" is necessarily a piece of folly, for, as I have shown, medicines cannot be prescribed in appreciable quantities in accordance with that law.

This question needs no further discussion to convince those of its falsity who believe in the correlation, conservation and unity of force. Force is an attribute of matter and cannot be developed without it. It is also as persistent and eternal as matter itself. The amount of force present in any given case depends upon the material agencies brought into play in producing it. One hundred pounds of coal will produce more heat than fifty; a thirty-cell battery will give a stronger electric current than one of twenty cells; one hundred pounds of steam has more power than fifty, and so on; and yet homœopathists, in the middle of the afternoon of the nineteenth century, ask us to believe that they are

developing a dynamic power at the same time they are diminishing their materials ninety-nine per cent. at each successive dilution.

But Hahnemann says the shakings produce this power. (See page 221 of the Organon, already quoted on page 107.)

If a continuous shaking of half an hour enhances the power of the medicine thirty fold, it will be necessary to exercise great care in its transportation from place to place, and persons who expect to practice in the country will have to calculate what the effect of a hard day's ride over a rough road, on a trotting horse, may have on their physic.

Where does this force come from? Hahnemann does not certainly claim that the force liberated by the strokes of the arm is absorbed and bottled up with the hundred drops of alcohol in the vial! If it is, Bœricke and Tafel, in using "twelve powerful strokes with each potency," would evolve sufficient force before they reached their one-thousandth potency to destroy any patient to whom it might be administered. But these "powerful strokes" are made by hand. It is an interesting calculation to those of a mathematical turn of mind to determine the exact number of strokes required to carry one drop of a mother-tincture up as high as the one-thousandth potency, or determine the strength of the dose which this potency contains. I began this calculation and carried it up to the thirtieth dilution, and here is the result.

Take, for instance, one drop of this mother-tincture; this is mixed with 99 drops of alcohol, contained in a vial, and having received twelve strokes is called the first dilution. The second dilution will consist of 100 vials and 1200 strokes. In the third dilution we will have 10,000 vials with 120,000 strokes. With the fourth dilution we will have 1,000,000 vials with 12,000,000 strokes. The fifth dilution, will be contained in 100,000,000 vials and will have received 1,200,000,000 strokes. With the sixth dilution we will have 10,000,000,000 vials with 120,000,000,000 strokes. With the seventh dilution there will be 1,000,000,000,000 vials with 12,000,000,000,000 strokes. With the eighth dilution there will be 100,000,000,000,000 vials with 1,200,000,000,000,000 strokes. The ninth dilution will consist of 10,000,000,000,000,000 vials with 120,000,000,000,000 strokes. The tenth dilution will be contained in 1,000,000,000,000,000,000 vials with 12,000,000,000,000,000,000 strokes. It is certainly unnecesssary to pursue the steps of this calculation any further, for it will be seen that it soon rises into infinity. When the thirtieth dilution is reached there will be on hand the enormous number of 10,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000 of vials with twelve times that number of strokes.

It is beyond my power to enumerate this immense number. With no time for setting down a vial and

picking up another, an active man can make one "powerful stroke" per second, or sixty strokes per minute, or 360 strokes per hour; and by making ten hours per day he would make in that time 3600; and by working each day in the year, including Sunday, he would in that length of time accomplish 1,314,000 strokes. To give each one of these vials containing the thirtieth potency twelve strokes, it would require him to work 661 quadrillions, 822 trillions, 919 billions, 336 millions and 1050 decillions of years.

If each dilution was placed in a separate vial, on end, in a line, and each occupied a half inch of space, the line would extend 63 sextillions, 131 quintillions, 313 quadrillions, 131 trillions, 313 billions, 131 millions, 313 thousand, 131 miles and 1653 feet.

Estimating the distance to the sun as 90 millions of miles, a man would be required to make the round trip 350 quintillions, 729 quadrillions, 517 trillions, 396 billions, 285 millions, 72 thousand, 961 times, in order to reach these vials, so placed.

If each vial weighed a half ounce (16 ounces to the pound), the whole number would weigh, 156 sextillions, 250 quintillions of tons (2000 lbs. to the ton), sufficient to load 15 sextillions, 625 quintillions of railroad cars, of 10 tons each; or 3 quintillions, 906 quadrillions, 250 trillions of trains, of 40 cars each. If the cars were 25 feet long, and made up into trains 100 miles long, there would be 739 quadrillions, 820 trillions, 71

billions, 22 millions, 722 thousand, 537 trains and 1856 cars.

To manufacture the quantity contained in the above mentioned number of vials, there would be required 11 sextillions, 10 quintillions, 744 quadrillions, 186 trillions, 46 billions, 511 millions, 627 thousand, 906 hogsheads (of 140 gallons each), 1 pint and 2 ounces of alcohol. Suppose there were 500 millions of people living in the world at one time, and each person should use a pint of this medicine daily, it would require 123 trillions, 203 billions, 348 millions, 833 thousand, 229 years to use up the result of one drop of a mother tincture, diluted to the thirtieth potency, and still leave unused, 11,627,360 pints, sufficient to consume the time from the foundation of the world to the present time and also a very liberal slice off eternity.

If this be true in regard to this potency, how can the number of years be computed which would be required to raise a remedy to the one thousandth potency? Yet this vast number of years does not include those spent on the potencies preceding the thirtieth. Just think of it! If Adam had begun this agitation the day God made him, and had worked faithfully ten hours per day, he would still be shaking, away below the tenth dilution, and yet all this shaking is for the purpose of dynamizing *one* drop of the mother-tincture.

In the face of this calculation the principal homœopathic pharmaceutical establishment in the United States

advertise that they have carried up to the two hundredth potency two hundred and fifty remedies; one hundred and fifty to the five hundredth, and one hundred to the one thousandth potency, by hand, giving each potency twelve powerful strokes; and by using a steam trituration apparatus they are enabled to accord two full hours to each potency.

Can it be that the fool-killer has visited this planet since Hahnemann proposed this theory?

To the mind of a person having any knowledge of the *modus operandi* of medicine, it would be unnecessary to ask the question as to whether these attenuations have any influence on the system for good or evil? He would answer you immediately, that they were of no use whatever as remedial agencies. The fact has been demonstrated long ago, and the subject has ceased to be discussed in our modern works on materia medica, that medicines are absorbed into the circulation and act as material substances or agents, impressing the system and acting upon the different tissues and organs of the body, in direct proportion to their power in altering or changing molecular action; in other words, they act by their presence; retard, arrest or promote physiological, chemical and mechanical changes; in fact, they are simply forces, and exert an influence for good or evil in proportion to their presence as such. Some of them retard the metamorphosis of tissue and arrest or modify the ameboid motion of certain cells of the body, by their mere

presence. This class of remedies interferes with nutrition and lowers the temperature of the body; others accelerate these changes and have the contrary effect, in a slight degree, upon the activity of molecular change, and consequently elevate the temperature to a slight degree, though scarcely appreciable; others combine chemically with certain tissues and organs.

I cannot introduce the proofs of the statements here, but I will refer the reader to the current works on materia medica, and especially to Headland's excellent work upon the Modus Operandi of Medicine.

Now, if medicines are absorbed into the circulation, and I presume no one will question it, what force can be exerted by such an infinitely small atom of matter as is contained in any of these high potencies? An ordinary blood corpuscle would absorb millions of them and not sensibly increase in size or weight by the process.

But, say the homœopathists, we know that these attenuations do not act as physical or chemical agents, but they have a dynamic force or power, and it is to this fact that they owe their efficiency as therapeutical agents. Very well; let us look at the subject from that standpoint. If they have a dynamic power, they ought to be able to effect the system dynamically. I have already stated that the vital force can be affected only by effecting changes in the molecular constituents of the body. The easiest way to measure this change will be by the thermometer, as the manifestations of force, such as heat,

light, electricity and motion all mean one and the same thing.

If these medicines have any power at all, they will elevate or lower the temperature of the body. It is not necessary for me to state that they have no such power; right here this point can be settled once and forever. The clinical thermometer is alone sufficient, if all other evidences were wanting, to forever silence this nonsensical twaddle of homœopathists in regard to the dynamic power of their attenuated medicines. In order to complete my argument, let me state what is now known to be a clinical fact. In all the acute infectious diseases, which are characterized by high temperature, the danger to life arises from the persistency of this elevated temperature. This causes death directly, by producing paralysis of the heart and brain; and indirectly, by producing congestion, inflammation and degeneration of vital organs.

Hence, since the discovery of this fact it has been an object of research to find remedies which would control this high febrile condition and lower the temperature as nearly to the normal as possible. Careful and numerous experiments conducted for this purpose have disclosed the fact that large quantities of remedial agents have to be administered in order to accomplish this result; ten grains of quinia will not lower the temperature of a typhoid patient, neither will twenty grains; but from thirty to forty grains will reduce it, if admin-

istered at the proper time and in a proper manner, nearly, if not quite, to the normal.

I challenge homœopathy to produce a remedy, above the second potency (centisimal scale), which will reduce the temperature in well marked cases of typhoid fever below ninety-nine degrees, any time during the first or second week, or the first half of the third week of the disease; and I will agree to furnish the patient myself, the medicines to be prepared and administered in the presence of responsible parties of both schools. I wish to stipulate, however, that this experiment shall not be continued sufficiently long to jeopardy the life of the patient. Rational treatment lowers the temperature in these cases in a few hours, say from 105° to 100° or under.

Homœopathy cannot avail itself of the antipyretic treatment in acute infectious diseases; none of its attenuations can lower the temperature of fever patients even the fractional part of a degree; and as the influence on the temperature is the easiest way that we could estimate its dynamic power, the conclusion that they possess no such power is certainly not unreasonable. Neither do any of these dilutions possess the power of elevating the temperature of the body.

Hahnemann says that:—

"Almost every drug, in its pure effect, produces a specific, distinct kind of fever, and even a species of intermittent fever with its alternating stages, differing from fevers produced by other drugs."*

* Page 168 of the Organon.

This is one of Hahnemann's most serious mistakes, and has contributed largely in leading him into many of his errors. It has been shown recently, by numerous observations with the thermometer, that few drugs, if any, possess the power of elevating the temperature of the human body; on the contrary, all the drugs which were supposed formerly to do so, such as quinia, brandy, etc., have a contrary effect. Belladonna seems, however, to elevate the temperature a fraction of a degree, but further observations are necessary to confirm this statement, as the slight rise occasionally observed heretofore may have been owing to some other cause.*

Now if no medicine, even in appreciable quantities, will elevate the temperature of the human body, what becomes of the law of similars in regard to fevers? Where will a medicine be found that will produce a similitude of symptoms in a case of fever without elevation of temperature? For certainly no disease is similar to fever without an elevation of temperature.

But, says the homœopathist, we care nothing about the elevation of temperature; we make up our "totality of symptoms" from the "*disordered sensorial condition*" of the patient; and by removing this "totality of symptoms," we remove the cause together with the disease.

My reply to this is that the disordered sensorial con-

* *Vide* St. Louis *Medical and Surgical Journal*, Sept. 5, 1880. Observations by the author upon the influence of hypodermic injections of Sulph. Atropine upon the temperature during the treatment of sciatica by this process.

dition of the patient is a result of the fever and not the cause, and the most rational method of removing it is to cool the fever, and this, in fact, proves, by observation, to be the case; for these symptoms always disappear with the fever, whether the result of treatment or by the unaided efforts of nature. Hence, I claim that observations with the clinical thermometer, while experimenting with drugs, prove clearly that homœopathic remedies have no influence, either as physical or dynamical agents; and also, that it further demonstrates the folly of the so-called law of similars, so far as fevers are concerned; for who ever saw a drug-disease similar to a fever without the elevation of temperature? In fact, the only condition necessary in fever—the disease itself—consists in an elevation of temperature, caused by a rapid oxidation of the tissues of the body; all others are superadded.

CHAPTER XV.

Discussion of Homœopathy Continued.

In the preceding chapters I have presented a fair discussion of the leading principles of homœopathy, as taught by Hahnemann himself; and in order that I might not be accused of misrepresentation, I have quoted his exact words, rather freely on some points, and have shown a few of the leading objections to his system, as they occurred to my mind.

I shall now proceed to show by quotations from the current homœopathic literature of the day that there is quite a respectable number of homœopathists who have arrived at the same conclusion as myself in regard to high dilutions, and that some of them have also abandoned the law of "Similia similibus curantur."

There has been a war raging in the homœopathic camp for a number of years, between low and high dilutionists, with a steady gain by the latter. In some parts of Europe even the name of homœopathists has been discarded, and they now call their system "The Specific School of Medicine."

As long ago as 1847, M. Rapou, who was a great admirer of Hahnemann, and a homœopathist, published a work, called the "Homœopathic Doctrine," in which he says:—

"The law of similars is positive, but it does not constitute the general law of therapeutics. Medicamental substances may operate by the law of contraries. Antipathy is as often in play as homœopathy; both are secondary and accessory modes. The great principle is the *specificity*, and the most important problem is not to see the similarity between the remedy and the disease, but to find, directly, the specific appropriate to each morbid state. Dynamization does not exist even where, by many, its importance has been greatly exaggerated. Dilution is incapable of developing a medicamental efficaciousness in most substances which are inert in their natural state, and which Hahnemann has put among the number of active remedies. Infinitesimal doses have no marked action; it is necessary, ordinarily, to employ tinctures and powders, and never extend them beyond the third or fourth divisions. Our medicines may be administered without inconvenience in the ordinary pharmaceutical preparations, and the various allopathic remedies may be employed conveniently with them. Clinics must become the principal source of indications, and concur, in the largest degree, to the formation of our *pure materia medica*. This last part of science is to be reconstructed; an anatomical and physiological classification of symptoms must be introduced into it. The theory of psora and its pretended consequences is false in all respects. We can and we must seek to combine the specific procedure with the usual indications. It is proper to fall back to the use of pharmaceutical mixtures."

This question is a fruitful theme for discussion at the meeting of almost every homœopathic association. At the meeting of the Illinois Homœopathic Medical Association, for 1878, a paper was read before the Bureau of Materia Medica on "*The Causes of the Division in our Ranks.*" During the discussion of this paper a great

variety of opinions were expressed in regard to the law of similars and high and low potencies, and to an unprejudiced outsider it would seem that the cardinal principles of homœopathy are now interpreted to mean everything or anything, to suit the fancy of any particular individual.

We quote the following from the *Medical Investigator*, of July 15th, 1878:—

"The characteristic symptoms in Hahnemann's Materia Medica are those of the primary symptoms of drugs, and seven-tenths of the symptoms in the chronic diseases are also primary. This was what caused Hahnemann to go higher and higher in his attenuations in order to avoid aggravations and make good cures. But secondary symptoms are just as important and valuable as primary; and if we fully understand their importance we shall be just as successful when selecting remedies from their secondary symptoms as when we select them from their primary. Those who do not appreciate this fact suppose that when a material dose is used the effect is palliative or antipathic. Such is not the case. A medicine is homœopathic to disease, whether selected from its primary or secondary effects. For example: *Camphor* is primarily homœopathic to cerebral congestion and spasms, and in such cases high potencies should be used. The secondary effects of *camphor* are those resembling cholera, therefore *camphor* does no good in choleraic symptoms unless given in appreciable doses. *Aconite* is primarily homœopathic to chill with vasomotor spasm, secondarily to fever, active congestion and inflammation. To be successful with *aconite* the higher dilutions should be given in the cold stage, and low dilutions in the hot stage, of fevers. Then there are often cases of disease where the patient is suffering from such unutterable anguish and pain that no time can be

spared to select the true similium, and we are driven by every prompting of humanity to give a palliative, as *opium*, or some anæsthetic. But to *cure* our patients we must give a remedy that is primarily or secondarily homœopathic to the case. No medicine *can* cure unless it *is* homœopathic. The law of similia is the universal law of cure. All the real cures made by Allopathists are owing to the homœopathicity of the drug or drugs given. It is a mistake to claim that Hahnemann's great cures were made with high dilutions. Some of his best cures were made with crude doses, as will be seen by reference to his lesser writings. The author of this paper may suppose that *opium* is only palliative for diarrhœa, but *opium* causes diarrhœa secondarily. It often cures painful diarrhœa by its secondary action, for Hahnemann says all the pains of *opium* are its secondary effects. I might go on indefinitely, to show where the secondary action of drugs is not taken advantage of by our school. If they understood this action, and the law of dose which belongs to it, they would not talk so much about palliatives, but claim all cures, rightfully, as belonging to us."

This explanation is certainly sufficiently flexible to explain the modus operandi of all remedies, and leaves nothing further to be desired.

The next speaker says :—

"I was never good at splitting hairs when a young man, and I am too old to learn now. Thirty-four years ago I first adopted homœopathic principles. My preceptor used the low potencies, from the third to the sixth, and I got to using them. I have not cured all my cases; some died in spite of my treatment, and many got well in spite of my treatment. When sent for, I try to relieve, and if I know anything that will relieve, I do not hesitate to give it. I often give *morphine*, and afterwards give *atropine* or *nux vom.* I claim to be a strong

homœopath, but I have not cured ovarian tumors with the hundred thousandth of *kali bichromicum*, but I have cured ovaritis with *atropia*, and when the fever runs very high, *aconite*, every hour till the fever passes off or sensibly remits."

The next speaker says—

"Dr. H. has expressed my sentiments exactly. It is not a question of potency; it is a question of curing the patient. . . . . When we are called to a patient it is our duty to relieve his sufferings as quickly as possible; but should we give *morphine?* What is the effect of *morphine?* Its effect is to deaden the nervous system so that it cannot feel pain. Pain is the voice of nature crying for relief, and is the true physician's best guide to the seat and character of the cause of the pain; deadening the nervous system by *morphine*, or any of its equivalents, is virtually choking off nature's voice calling to us for relief, and pointing to the spot where she suffers, thus leaving us to work in the dark."

"Better let the patient suffer a little while than to complicate the troubles and retard the final recovery, or risk the patient's life by paralyzing the governor, the nervous system, with *morphia*. . . . . I condemn the use of *morphine* in these cases. *Morphine* is only useful as a *dernier ressort*, a last means, when you acknowledge yourself beaten. In curable cases it is almost criminal to give *morphia*."

The next speaker expresses himself to the effect that

"properly selected remedies do not fail, and I have the first time to be driven to any other resort than the homœopathic remedy."

Dr. T. says:—

"In my early education in the science of homœopathy I was taught to use the lowest potencies; mother

tinctures, etc.; also, to alternate ; and my preceptor was a strong advocate of both these features, remaining so until his death. . . . . Experience soon demonstrated this method the better way. My first cure made was one of fetid catarrh, of many years' standing, with two or three doses of *Silica* [200]. I continued thus, mostly in the chronic cases, with much better results. I do not confine myself to the high potencies now, exclusively, but also use low, and exceptionally the tincture, but always use the single remedy."

"The paper charges criminality, and arrogance, as before remarked, but if I can prove by practical demonstration that I can cure diseases with the single remedy, I would ask the question: Is there not more certainty in thus prescribing, than where two or more remedies are administered? If I impart such knowledge to a brother practitioner, and try to show him the better system, and to my mind the more certain way, am I to be charged with ignorance, arrogance and criminality? On the other hand, should the patient die while under the administration of a high potency, well selected and according to the law of *similars*, and to the best of my judgment, I do not imagine, nor am I criminal, arrogant, nor yet censurable, much less ignorant."

This is sufficiently liberal to suit the most unreasonable Eclectic in the whole country.

Dr. B. says :—

"I wish to plead guilty to this charge. I am a homœopath, and emphatically announce myself as such; but I am not a homœopath according to that paper. There are many points in Dr. W's, paper that I would like to answer, but as I cannot do so without getting mad, I will let them pass. But I will say that a man holding the position of professor of materia medica in a homœopathic medical college, who tells the students that fifteen minutes is all the time required to make a homœopathic trituration, shows

mighty little grace in denouncing as fools those who are trying to follow Hahnemann's teachings."

Dr. T. says:—

"There is one point in this paper to which I would like to call attention: That we are not to rely upon homœopathic treatment in desperate cases. If the homœopathic law of cure is true, it is in just such bad cases that we should depend on the law, and see with our greatest knowledge to apply this law with exactitude. We have no time in these cases to dally with empiricism, while we have a law to guide us; less dangerous cases will answer for such experiments. If you have a severe case of pleurisy, by all means treat it homœopathically, affiliating your remedies with great care. Even in uterine hemorrhage homœopathy has not left me in the lurch yet. I have yet to lose one case of uterine hemorrhage, and I have had cases desperate enough to frighten any one."

Dr. C. says:—

"This discussion seems rather profitless. We have discussed this matter every year for twenty-four years, and we cannot agree any more than two men are psychologically alike. It is our boast that we should have liberty in certain things. I hope the committee on the president's address will be allowed to report, and so close this discussion, which may last all day."

The following report on homœopathy was made:—

"Your committee believe that the 'great trial of Homœopathy' has long since been successfully passed. It has no longer danger to apprehend from its enemies. Its only dangers, if any, will proceed from its own household. Declaratory, declamatory, and defamatory resolutions concerning principles fixed as the immutable hills are impolitic, unwise and degrading. Independence of thought and action is and should be as inalienable to medical as to political citizens.

"The spirit of the address meets our hearty approval.
Respectfully submitted, COMMITTEE."

The following resolution was offered, discussed and tabled:—

"*Resolved*, That, as an association having for its object all investigations and other labors which may contribute to the formation of medical science, we hereby declare our firm belief in the principle "*similia similibus curantur*," as constituting the best general guide in the selection of remedies, and fully intend to carry out this principle to the best of our ability; this belief does not debar us from recognizing and making use of the results of any experience, and we shall exercise and defend the inviolable right of every educated physician to make practical use of any established principle in medical science, or of any therapeutical facts founded on experience, and verified by experiments, so far as in his individual judgment they shall tend to promote the welfare of those under his professional care."

By tabling this resolution this body of learned homœopathists placed itself in the absurd position of refusing to indorse its own fundamental principle, "*Similia similibus curantur*." The same action also refuses to indorse the liberal proposition enunciated in the latter portion of the resolution; so it is impossible to tell just what homœopathy means in the State of Illinois.

The Homœopathic Medical Society of New York appears to be involved in the same or a similar difficulty, judging from resolutions which were reported at the meeting of 1879. It appears, from the tenor of these resolutions, that the meeting for the preceding year had passed others of quite a different character. Not hav-

ing the published proceedings of that year in my possession, I can only infer their nature from those passed in 1879. We insert the report of the committee to which was referred the preambles and resolutions adopted at the last annual meeting, brought before the society upon a motion to rescind and expunge from the records those passed the year before :—

"Your committee, representing the extremes of our school, both in practice and views, have unanimously agreed to present the following paper. They ask for its careful and liberal consideration. They hope it may be received by the society, ordered to be printed, and sent to every homœopathic physician of the State.

"They suggest that the committee, or their successors, be continued during the year; that the chairman be the medium of correspondence with any member of the profession who may desire so to do; and that their final report be made to the society at the afternoon session of the first day of the meeting of 1880.

"WHEREAS, The resolution passed by this society at its last annual meeting does not justly express the views of our school, and is calculated to place us in a false position before the world,

"*Therefore*, We, the members of said society, deem it expedient to put upon record the following avowal of our position :—

"*First.* That we adhere to the formula, '*similia similibus curantur*,' as enunciating the great therapeutic law for the treatment of disease. Evolved by induction, formulated by the venerable Hahnemann, tested and approved by thousands of physicians during scores of years, we are assured that, with our increased knowledge of the *Materia Medica*, we shall be able to demonstrate more fully its universality as a therapeutic law, and show in a more perfect manner its harmony with other and cognate natural laws.

"*Second.* That we clearly and emphatically distinguish between a 'therapeutic law' and the laws of chemistry, physics, and hygiene; and while in the treatment of disease their formula, '*causa sublata tollitur effectus,*' is often to be remembered and used with advantage, yet such laws and such action in no way infringe upon or invalidate the *therapeutic law,* '*similia similibus curantur.*'

"*Third.* That we have not in the past, nor do we now, yield one tittle of our rights, as physicians, to use any means or appliances of the general profession to aid in the treatment of our patients (under the homœopathic law), or in the palliation of their suffering, through the application of any physical, surgical, chemical, or hygienic law, leaving the question of such use to the individual judgment of the practitioner, assured that they will be least used by those who are the best acquainted with our *Materia Medica,* and best able to wield its immense *armamentarium.*

"*Fourth.* That, contrary to the opinion held by some, we most thoroughly indorse, and would most earnestly enforce, the study of pathology and pathological anatomy in our schools and by our students, as determinating in the direction of a broader medical culture.

"*Fifth.* That the great work of our school, in the advancing of medical science, is the proving of drugs, and the enlarging, purifying and verifying of our *Materia Medica.*

"We point with just pride to the work we have already accomplished; and though we may lament that it has not been more thorough, and less open to criticism, yet we hail the continued appropriation by other schools of the medicines, and methods of using them, that we have introduced to the profession, in those diseases where their usefulness has been indicated to us by their pathogenesis, as a virtual indorsement of our labors, and to a certain extent vouching for their substantial accuracy.

"We do not look upon this action on the part of our *quondam* opponents with jealousy, but welcome it cor-

dially, *when credited*, as the dawning of a better era. We freely yield our labors for the use of others, as only a just contribution to the general profession from which we have received so much.

"*Sixth.* In relation to the dose of the *simillimum* proper to be exhibited, we discover that the most brilliant triumphs of homœopathy have been achieved by the use of attenuated medicines; yet, as a matter of fact, we find that even the crude drug in minute doses will exhibit power to become a remedy under our therapeutic law.

"But, as we as yet have not been able to deduce a law to guide us in determining the *amount* of a drug to be used, or the *attenuation* to be exhibited, in order to meet the demands of any case most accurately, this society, while on the one hand it refuses to join with those who decry attenuated medicines, on the other will not refuse to recognize as brethren those who, governed by their honest convictions, can only exhibit crude medicines or the lowest attenuation in the treatment of the sick."

At the annual meeting of the society held in Albany, N. Y., February 10th and 11th, 1880, this committee made the following Report:—

"The committee found members trammeled by doctrine, rigidly enforced, which they did not believe in. The committee have endeavored to act as peacemakers, by formulating fundamental principles on which all or at least a large majority can agree.

"The committee to whom was referred the report upon the 'State of Homœopathy,' received by the society at its last annual meeting, would respectfully report:—

"That in accordance with the resolutions contained in the report, the members of the committee have during the year conducted an extensive correspondence with the profession throughout the State.

"They have endeavored to obtain from those who feel aggrieved a statement of their cause of complaint; and they have attempted to write a report to the society which shall be true to the principles of Homœopathy, and yet broad enough to cover the real issue which seemed to demand the resolution of 1878.

"Your committee has found a general and most hearty concurrence of belief in the law, *similia similibus curantur.*

"It has found a diversity of sentiment concerning the use of attenuated medicines, and as to the reliability of provings made with them.

"There is also a lack of harmony prevailing throughout the profession, as to the expediency of putting upon record any expression concerning the use of extraneous appliances, when treating a patient with internal medication, administered according to our therapeutic law.

"It is very generally conceded, however, that the mere fact of being a homœopathic practitioner has debarred no one from the right to use such appliances, if, in his judgment, they are demanded.

"Your committee wish to draw careful attention to the protest of those engaged in the passage of the resolution of 1878.

"They contend that their position has been misrepresented and the intent of their resolution most unjustly judged.

"It seems to your committee that in their attempt to place themselves in a proper position before the community, they were betrayed into expressions that appeared to be false to the principles they had so long professed, and for which they had so long contended.

"Your committee remembers that words do not always convey the thought intended, and they cannot do otherwise than exercise the utmost charity toward the movers of the resolution of 1878, and to express their confidence in their protestations. We deem it expedient, however, to calmly and decidedly put ourselves upon

record as misrepresented by it, and we wish to do this in plain and unmistakable language.

"Your committee therefore suggests that the resolutions which they herewith present be adopted as a substitute for the preamble and resolution passed by this society in 1878, as expressing the views of this body in regard to the matter under consideration."

The resolutions referred to in the preceding paragraph are the same, in substance, as those of 1879.

"After considerable skirmishing the report was adopted by a vote of 33 to 15.

"The arguments offered by the opposers of the resolutions consisted of negative qualities chiefly, the points mainly advanced being, that a formal declaration of principles was unnecessary and even harmful, as indicative of a want of confidence in the universality of application of the homœopathic law. While they were willing to use any and all other measures they were not disposed to make public acknowledgment to that effect.

"The argument advanced by the majority was chiefly embodied in the remarks by Dr. D. He stated substantially, that there was nothing objectionable in the report or in the resolutions. They were the result of an extended correspondence on the part of the committee with homœopathic physicians throughout the State; they clearly and forcibly express the sentiments of a majority of the profession. By formally adopting them the controversy on this subject will quickly terminate. They leave the question regarding liberty of opinion and action where it ought to be left, viz., that he who believes in our law of cure, and practices according to his best ability, is a homœopathist. He had followed this plan since his membership in the society, more than twenty-five years. He believed the homœopathic to be the best therapeutic system, *but not the only available and useful one.* He held it to be his duty at the bedside of the patient to use every known method extant, and

that he would do in spite of any organization under the sun.

"If all the members have this privilege, as is most assuredly the case, the society ought to sustain them in the enjoyment of it. A church having a code of morals that its members could violate with impunity would lose its character and influence. We claim the right to practice as we please, and some present say the society should cover the breach. Is that the best course for the society to pursue? No, let the society rest on a liberal, sound and generous basis before the world, and declare that it stands behind its members and endorses their acts. I would not give a fig for a society that cannot be as independent and manly as its individual members."

Thus it will be seen, by the proceedings of the homœopathic societies of these great States, that there are two parties or factions in that school; one of which not only indorses the pure homœopathy of Hahnemann, but carries its dilutions and attenuations much higher than he recommended. The other faction is ready to abandon high dilutions altogether, and begins to question the divinity and universality of this great law of "*Similia similibus curantur.*" This division extends throughout the entire ranks of homœopathy, and will, sooner or later, lead to an open rupture; in fact, steps have already been taken by the liberal wing to establish a school or college in Buffalo, N. Y.

The dogmatic wing of the school has designated the other party as Eclectic homœopathists.

Dr. Lewis Sherman, of Milwaukee, Wisconsin, made a proposition to the Academy of Medicine (homœo-

pathic) to test the medical qualities, or more properly the efficacy of the thirtieth potency; from which we quote:—

"A TEST OF THE EFFICACY OF THE HIGH DILUTIONS.

By LEWIS SHERMAN, M.D., Milwaukee, Wisconsin.

"I propose a scientific test of the pathogenetic and therapeutic action of the thirtieth Hahnemannian dilution. The object of this test is to determine whether or not this preparation can produce any medicinal action on the human organism in health or disease.

"A vial of pure sugar pellets, moistened with the thirtieth Hahnemannian dilution of Aconite, and nine similar vials, moistened with pure alcohol, so as to make them resemble the test pellets, shall be given to the prover. The vials are to be numbered 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10. The number given to the Aconite vial shall be unknown to the prover, and it shall be his task to determine which of the ten vials contains Aconite.

"These preparations are to be put up with the greatest care, in the presence of the members of the Milwaukee Academy of Medicine, and then placed in the hands of an unprejudiced layman of unimpeachable honor, who shall number and dispense the vials as they are called for by the provers.

"The provers must be physicians of acknowledged ability, who possess a good knowledge of the recorded symptomatology of Aconite, and who have faith in the efficacy of the thirtieth dilution.

"If a hundred physicians engage in making the test, and all or nearly all single out the Aconite pellets, the inference will be that the thirtieth dilution represents the medicinal properties of Aconite.

"If only about ten of the hundred succeed in the trial, the inference will be that the thirtieth dilution of Aconite possesses no medicinal properties, for according to the laws of probabilities about one in ten would guess right without making any trial.

"The experimenters must be physicians of acknowledged ability, who possess a good knowledge of the therapeutic indications of the remedies tried, and who profess faith in the efficacy of the thirtieth dilution. If in this trial there be about one hundred per cent. of successes, the inference will be that the thirtieth dilutions have curative powers. If there be only about fifty per cent. of successes, the inference will be that the thirtieth dilutions have no curative powers.

"If those who advocate the use of these preparations refuse to participate in the experiment, the profession will have reason to suspect that they are insincere.

"If the result of the test should be to prove that the thirtieth dilution of a drug can make the sick well or the well sick, then it must be acknowledged that in this a great discovery has been made in physics, as well as in medicine, and the science and ingenuity of the civilized world will be set at work to find out the useful applications of the discovery.

"If the result should be to prove that the thirtieth dilution has no such powers as it is claimed to have, then the medical profession has a right to demand that the symptoms supposed to have been produced by the thirtieth and higher dilutions be expunged from our Materia Medica, and that advocates of the potentization theory shall henceforth cease to prate their 'cures' in medical journals and before medical societies which are avowedly devoted to the interests of science."

This proposition was accepted by the academy and the medicines were prepared and placed in the hands of a minister for the purpose of distribution among the provers, and perhaps in a short time we will have the published results.* This proposition has been severely criticised in the medical journals of the homœopathic

*The following extracts from the final report of the Committee on Sherman's test of the Thirtieth Dilution is hereby appended.

school, many of the high dilutionists seeming to fear the result.

In a paper presented to the State Homœopathic Medical Society, of Tennessee, and published in the *American Homœopathist*, March 1878, the writer discusses the subject of internal and avoidable obstacles to homœo-

---

Unfortunately for the high dilutionists, none of the provers succeeded in finding the medicated pellets.

"FINAL REPORT ON THE MILWAUKEE TEST OF THE THIRTIETH DILUTION.

"The Milwaukee Academy of Medicine, in completing the Pathogenetic and Therapeutic Test of the Thirtieth Hahnemannian Dilution, makes the following report:—

"That the unavoidable delay in making the report was due to the removal of the depositary, Rev. G. T. Ladd, from this city to Brunswick, Maine; to his absence from home, caused by the illness and death of his father; and to the tardiness of the reports from the experimenters.

"That in carrying out the provisions of the test we have adhered strictly to the details of the plan for a scientific test of the pathogenetic and therapeutic action of the thirtieth Hahnemannian dilution, full particulars of which were published in the circular issued by this society in December, 1878.

"We would report—

"That the medicines used in making the dilutions for the *therapeutic* test were obtained from the pharmacy of Messrs. Bœricke & Tafel, and the *aconite* tincture was tested by several members of this society and found to produce its pathogenetic effects.

"That the dilutions were made by this society, in accordance with the Hahnemannian directions for the preparation of the thirtieth.

"That at a regular meeting of the society, held April 1, 1879, the following resolution was unanimously adopted:—

"Upon application by any Professor in a Medical College, or any other public advocate of the High Potencies, the Academy will prepare and furnish the Thirtieth Hahnemannian Dilution of *any remedy* in common use, for the purpose, and in accordance with the terms, heretofore published in the pamphlet entitled 'A Test of the Thirtieth Dilution.'

"That in accordance with various requests of the provers we have prepared, in addition to the dilutions mentioned in the pamphlet, *pathogenetic tests* of *nux vomica*, *belladonna*, and *arsenicum album*, and *therapeutic tests* of *sulphur* and *digitalis*.

"That the bottles containing the thirtieth dilution, thus prepared, together with a bottle of the alcohol used in their prepara-

pathy, under the heads of, 1st. Materia Medica; 2d. Potencies; 3d. Pathology; We shall quote a portion of the article:—

"MATERIA MEDICA.

"The voluminous and unreliable materia medica forms a terrible stumbling block to the student of homœopathy.

---

tion, were given directly into the custody of the depositary. That he was also supplied with pure sugar pellets, vials and mailing boxes, and that he was requested to medicate the pellets, and dispense them according to orders which he might receive from the secretary.

"That the application for the test cases were given directly to the depositary as soon after their receipt as possible; that all cases given out were sent by him in response to application received by this society from the provers; and that in answer to our request we received from him a thoroughly sealed envelope, containing the subjoined report:—

"BOWDOIN COLLEGE, BRUNSWICK, Me., Jan. 26, 1880.

"*To the Milwaukee Academy of Medicine.—Gentlemen:* The report which is herewith submitted to you, I beg leave to preface with the following statements:—

"The work which you did me the honor to entrust to me has been most carefully and scrupulously done; the record has been accurately kept, and secluded from all eyes but my own.

"Great pains has (*have?*) been taken to exclude entirely the possibility of guessing the medicated vials, instead of discovering them by scientific experiment.

"Nothing has been permitted to indicate a difference in the vials tested, or to make it possible for any experimenter to detect in any way the reasons for choosing one number, rather than another, of all the vials numbered, to contain the medicated pellets.

"So far as the test has been made, it has been made under the fairest conditions possible for me to secure.

"With these remarks, I invite your attention to the appended itemized statement of the tests sent, the time of sending, the person to whom sent, and the numbers in each test of the medicated vials.

"These, gentlemen, are all the vials sent out by me in accordance with the instructions received from your committee.

"I am very respectfully yours,

"GEORGE T. LADD."

"In the tabular statement, the number of the medicated vial in the cases not tested, or not reported, has been withheld by the society, for obvious reasons. The last column, giving the

It seems as though the idea was to get *as many symptoms as possible* for each drug—regardless as to whether they are veritable drug-symptoms, or personal symptoms peculiar to the prover, or symptoms arising from other causes—and to search for medicines among all kinds of matter, sometimes too foul to mention, while there are

report of the experimenter, has been added, to make the report complete."

Date (1879).	No. of Case.	Name of Experimenter.	Residence of Experimenter.	Test.	No. of Tests.	No. of Medicated Vial.	Report of Experimenter.
Jan. 13	1	Dr. J. Thompson...	Greenfield, Mass...	Path.	1		No Report.
" "	2	Prof. C. B. Gatchell	Ann Arbor, Mich...	Ther.	5		"
Feb. 26	3	Dr. H. L. Waldo....	West Troy, N. Y....	Path.	1		"
" "	4	Dr. W. S. Gillett ...	Fox Lake, Wis.....	Ther.	5		"
" "	5	Dr. E. Lippincott...	Bowling Green, Ky	Path.	1		"
Mar. 1	6	Dr. W. H. Blakely..	" " "	"	1	10	Number 5.
" 31	7	Dr. W. B. Trites ...	Manayunk, Pa.....	"	1		No Report.
" "	8	Dr. G. R. Mitchell..	Richland C., Wis...	"	1	2	Number 4.
" "	9	Dr. C. R. Muzzey...	Watertown, Wis...	"	1	7	Number 1.
" "	10	Prof. A. Woodward	Chicago, Ill.....	"	1	1	Number 2.
" "	11	Dr. J. H. Thompson	New York, N.Y.....	"	1		No Symptoms
" "	12	Dr. N. S. Pennoyer	Kenosha, Wis.....	"	1	10	Number 4.
June 18	13	" " " "	" "	Ther*	1		No Report.
Mar. 31	14 15	Dr. C. H. Hall.....	Madison, Wis.....	Path.	2		"
May 5	16	Dr. M. A. Reis	Milwaukee, Wis...	"	1	2	Number 10.
" "	17	Dr. O. W. Smith....	Union Sp'gs, N. Y..	"	1		No Report.
" "	18	" " " "	" "	Ther.	5		"
" "	19	Prof. Uhlemeyer....	St. Louis, Mo.....	Path.	1	3	Number 5.
" "	20	" "	" "	Ther.	5	1	Arsenicum 1.
" "	21	Dr. W. F. Morgan..	Leavenworth, Kan	Path.	1		No Symptoms
" "	22	" " " "	" "	Ther.	5		No Report.
" "	23	Dr. O. S. Childs.....	Beaver Dam, Wis....	"	5		"
June 18	24	Dr. Collesson..	St. Louis, Mo.....	Path.	1		"
" "	25	" "	" "	Ther.	5		"
" "	26	Dr. Wm. Eggert....	Indianapolis, Ind..	Path	1		"
" 27	27	Dr. Petrus Nelson..	Minneapolis, Min..	Ther.	5		"
July 25	28 29	Dr. H. A. Foster ...	Buffalo, N.Y.....	"	2		"
" 28	30	Dr. T. L. Brown.....	Binghamton, N.Y..	"	1		"
" "	31	Dr. E. C. Morrill...	Norwalk, O.....	"	1		"
" "	32	Dr. C. W. Mohr.....	Philadelphia, Pa...	"	1		"
" "	33 34	Dr. W. M. Butler...	Middletown, N.Y..	Ther.	2		"
" "	35 to 39	Dr. L. A. Campbell.	Attleboro, Mass.....	"	5		"
" "	40	Dr. J. A. Pearsall...	Saratoga Sp'gs,N.Y	Path.	1		"
" "	41	Dr. T. A. Martin ...	Delavan, Wis.....	"	1		"

* Five vials, one containing Arsen. 30.

plenty of well-known and 'respectable' drugs, which, if properly proved, would furnish all that is required for the removal of disease. The consequence is a materia medica of many volumes and almost useless in a practical point of view."

"POTENCIES.

"The question of 'potencies' seems to have aroused a spirit of contention in the homœopathic fraternity, almost as bitter as any between the old school and the new. These dissensions surprised me as they have many others who have turned their attention toward homœopathy expecting to find the most perfect harmony. Why this feeling should exist I cannot see, for homœopathy does not mean small doses, nor high nor low 'potencies.' These should be left to the judgment of the practitioner; *all* who practice under the law of *similars* being homœopaths. The question of dose or quantity is not considered a cause for contention among the allopaths, each physician being considered capable of using his own judgment in such matters.

"The heat of this combat seems to be greatest among 'high potency' men, they setting themselves up as the *only true* homœopaths or followers of Hahnemann.

"RECAPITULATION.

TEN-VIAL, OR PATHOGENETIC TEST.

Number of Tests applied for and sent out	25
Number of tests on which reports have been received	9
Number of tests in which the medicated vial was found	0

TWO-VIAL, OR THERAPEUTIC TEST.

Number of tests applied for and sent out	47
Number of tests on which reports have been received	1
Number of tests in which the medicated vial was found	1

FIVE-VIAL TEST OF DR. PENNOYER.

Number of tests applied for and sent out	1
Number of tests on which reports have been received	0
Number of tests in which the medicated vial was found	0

"By order of the Milwaukee Academy of Medicine.

"SAM'L POTTER, M.D., *Prest.*

"EUGENE F. STORKE, M.D., *Sec'y.*

"*Milwaukee, Wis., Feb. 16th,* 1880."

"I notice frequently, in articles by some of the advocates of 'high potencies,' the term '*pure homœopathy*' applied to their system of potentizing remedies."

"There can be no such thing as '*pure*' nor '*spurious*' homœopathy; it is well defined in three words—'*similia similibus curantur*'—and *all* who accept this and follow it are homœopaths, and *none others*, however high their 'potencies' may be and however close their adherence to the 'single remedy."

"The homœopath must employ the *similar remedy;* and in order to do this successfully he must first know, from thorough and careful provings, and not from somebody's imagination, what his several remedies are found to do in the healthy human body; second, he must give his remedy in such form and quantity as to make the impression required; third, he must repeat his dose and regulate the circumstances of his patient as each case may demand."

"PATHOLOGY.

"A *great* obstacle to the advancement of homœopathy is the position taken and articles published by some of its would-be leaders against pathology. It cannot be possible that they wish to lower the standard of education among homœopaths. If they do *their* downfall is certain.

"If they drop pathology, why not drop anatomy and physiology and chemistry from the list? Why not, indeed, drop *every* branch from *their* catalogue which is taught in the allopathic colleges?

"*They* say that Hahnemann was opposed to pathology, but I think he only cautioned against it as used by the old school instead of symptomatology in the administration of medicines. *They* say that pathology is *materialistic.* In this I agree with them fully. What are they dealing with but *matter?* There is nothing very *spiritual* in a case of cholera morbus or delirium tremens; such an argument is too ridiculous to answer. To the *bodily* and not the *spiritual* ills we minister.

From an article contributed to the *Homœopathic Times* for January, 1878, one of the leading journals of that school, I will quote the following paragraphs:—

"In my judgment, we have sufficient evidence to warrant us in the belief that many diseases are removed when drugs are administered which, if taken by a person in health would produce certain morbid conditions resembling the existing disease; I say morbid conditions in contradistinction to the host of symptoms gathered from the patient, which are as likely to be imaginary as real, and result as much from fancy as from medicine, for we all know that no two persons will give us the same account of their sensations and sufferings, even though they may be the subjects of the same identical disease in every particular, so far as we can determine; any system of medication that proposes to use drugs which in their minute details resemble the endless phases of diseased action, lays down a proposition utterly repugnant to common sense, for the finite is expected to meet a demand only comprehended by the infinite, and any man who would be ready to avow that he understands the complications of disease and can interpret its mysterious development, so that he could apply the most attenuated atom to a remote organ passing through the complicated mechanism of the human body, which in itself is the epitome of the universe, would be declared by all men of thought either a knave or a fool. Homœopathy, as I understand it, is a system of medicine and not magic, and it has already done much, and is destined to accomplish still more, for mankind; it is yet in its infancy; and inasmuch as medicine is the result of experience, it is an unreasonable adventure for so young a child to push aside the accumulated proofs of past ages, for the trials of a day. Homœopathy has done a good work, and has wrought important changes in the healing art, and is entitled to unmeasured praise; for, in my opinion, it has played an important part in revolutioniz-

ing, to a very considerable degree, the therapeutics of medicine, and has demonstrated to the profession the fact that the curative effects of a drug can be obtained by doses so small as not to impair health or endanger life; this fact has been established by those who have used the low attenuations containing drugs in appreciable doses; and those who have adhered to the high dilutions are entitled to some credit, for they have demonstrated that the doctrine of the fathers was correct, and that a large proportion of the sick would recover without any medication; in other words, would get well if not interfered with.

"Homœopathy has merit as a principle, and deserves study, but its materia medica is in many respects only entitled to the condemnation of scholars and philosophers. For example, the voluminous compilation of Professor Allen, which must have been made by machinery, is entirely impracticable, and calculated to mislead the unwary. For every one knows that if all the homœopathic physicians on earth could have lived and commenced experimenting upon the morning of creation and continued actively at work to this moment, they could not have proven one-half of the symptoms attributed to the various drugs therein contained.

"We often hear men who have only had a limited experience speak of the wonderful, exact, marvelous and minute effects of drugs, with the greatest apparent confidence and flippancy. They tell us about certain fingers, or even portions of them, being affected by a certain remedy, at certain times, and at stated periods, after doing certain things, or they refer to a certain freak, whim, caprice, or fancy, that went flitting through the brain, and, infatuated with the idea that they have found a "key-note," they set the spiritualized atom at work to search out and remedy the existing malady, which it *does* to the gratification and astonishment of all except the *doctor* who despatched the pellet upon its glorious mission, because he was familiar with its most subtle and hidden power, and had plunged into the deep mys-

teries of creative wisdom. With such foolish jargon the profession is loaded down, and its burdens must be removed, or it will eventually be buried so deep beneath the popular judgment as to defy all possibility of resurrection, and whatever good it has accomplished will be lost forever.

"To prove a drug, as is claimed by the new school, upon the healthy organism, and demonstrate its exact nature and action, implies much more labor, and the whole thing is involved in far greater uncertainty than many suppose.

"The evidence we have upon this point is so diffusive, profuse and contradictory, that the whole system of drug proving is not only doubted by many, but is to-day, with all the boasting of learned authors and *unlearned* doctors, a mooted question in the scientific world and still remains to be demonstrated.

"Some excellent witnesses swear to altogether too much, and thus damage their testimony. Our therapeutics has demanded as its due too much, and, in fact, more than men or angels can contribute or comprehend.

"Let us look for a moment at the difficulties which stand in the way of obtaining the effects of drugs, as claimed by the homœopathic school, and when we have finished the task I am sure that we will be satisfied if we can obtain some *general* idea of medicine, and will be ready to set aside the nonsense of "key-notes," special indications," "peculiar sensations," and act upon facts that cannot be disputed.

"To give one or more persons a drug, and register all their peculiar fancies and ideas, does not furnish any reliable evidence of the real effects of the drug, evidence upon which a man is warranted to act who holds in his hands the responsibility of human life.

"If the system of proving drugs is true, it is too plain for comment or controversy that in order to arrive at correct conclusions the drug must be tested upon persons having in all respects the same physical and mental qualities; and even then the proceeding is attended with

doubt and difficulty, because the same agent does not always produce the same effect upon the same person, for reasons entirely unknown to the most learned among men; for example, one may take a narcotic, to ascertain its medicinal effects, and every time he repeats the experiment a new train of symptoms may be developed, and in this way the experimenter may be led into fatal error; then again, no two persons can be found so exactly alike that they can afford us proper evidence concerning the minute effects of a drug; then, too, we all know that the same drug, in the same quantity, will produce entirely different effects upon different individuals; nor does the difficulty end here, for the smell of a rose will develop disease in some cases, while most persons delight in the delicious odors. When we claim that we are familiar with the ultimate and particular action of drugs, we only assert that which is impossible and untrue, and entitles us to a place in the front ranks among the mountebanks who impose upon the credulity of mankind.

"While I am willing to admit that experiments upon the healthy have been productive of much good, I am not ready to deny the fact that the whole weight of testimony is still in favor of those who have arrived at conclusions by repeated trials upon the sick, and I would urge that both, and all means of knowledge be embraced to aid men engaged in the healing art, for all bear evidence of thought, and are freighted with the invaluable testimony of experience.

"Homœopathy is a system of therapeutics, and here, as in other schools, the physician is expected to select his drug and determine its quality, according to the necessities of the case before him; the heresy of high attenuations should have no place in our creed, nor home in our school, if we desire to advance and expand our influence, and secure for it public regard and confidence, because it cannot be demonstrated by any known method that either medicinal power or presence exists in the exalted attenuations, any more than it can be shown

that intelligent beings descend to the earth in raindrops.

"Homœopathy being a system of rational therapeutics, based upon possible conclusions, can take no part in the false and foolish doctrine of the potentization of drugs; this delusion belongs exclusively to the province of the magician, who can produce the most astounding changes in material things by the mention of peculiar words or the direction of his mysterious wand.

"The idea that a given substance can be indefinitely diluted and its power indefinitely increased by agitation, would have astonished the inhabitants of earth in the darkest and most superstitious ages of ancient Egypt.

"The men who can believe such an incredible wonder should not deride those who exposed the sick in public places, or treated disease by amulets, incantations, or charms; nor should they point the finger of scorn at the good old men who rubbed black cats over the stomachs of those who were tormented with the colic.

"If medicine becomes more active and efficient by diluting and shaking it, the same rule should apply to food, which under similar circumstances should become more nutritious. The principle has been tested upon milk and found to be a failure, and it is now an undisputed fact that milk cannot be improved by dilution and shaking.

"When human wants can be met by such a system of magic, when wine can be changed to the absolute blood of Calvary's victim, when bread can be transformed into the real body of Him who hung upon the cross, when the philosopher's stone shall have been found, when the laws of gravitation shall have been superseded by Yankee invention and genius, when the transmutation of metals can be effected, when the finite can grasp the infinite, when flourish has more potency than logic, when brass takes the place of brains, when man shall have achieved the creative ability of a God, then, and not till then, can he, by either magic or muscle, impart active life to inert substances; then, and not till then,

can he diffuse power throughout inanimate nature; then, and not till then, will the logic of the world allow spiritualized drugs a place in medical science."

These numerous quotations are certainly sufficient to prove that the homœopathic family is not a happy and harmonious one, as it, with certain fixed dogmatic principles, should be. It contains a sufficient quantity of disturbing elements to insure its speedy destruction.

Is homœopathic practice at the bedside based upon the principles which they teach, and do the practitioners of this school prescribe these attenuations? Some of them do. One wing of the school, the high dilutionists, prescribe the thirtieth, the one hundredth, the two hundredth, the three hundredth and the one thousandth potencies.

The low dilutionists not only prescribe the lower potencies, but crude drugs, in as large doses as the so-called allopathists. They also use strong local applications, in direct opposition to the teachings of Hahnemann. A few references taken at random from homœopathic journals, will be sufficient proof of this.

A writer in the *Medical Investigator*, June 1st, 1879, (page 464) recommends the use of a *strong solution* of chloride of zinc locally, also the dry chloride of zinc, in the treatment of alveolar abscess. The same writer recommends, in the same article, the use of tincture of aconite rad. locally. On the same page of the same journal an item is inserted, copied from the *Medical Advance*, in which the writer prescribes the tincture of

iodine, in four-drop doses each hour, equal to ninety-six drops per day; more than three times as much as an allopath would administer in the same length of time. A writer in the same journal for February 1st, 1879, prescribed a wineglassful of a decoction of eupatorium perfoliatum, four times a day.

In the St. Louis *Clinical Review*, June 15th, 1879, (page 128) five-grain doses of bromate of lithia, three times per day, are recommended. In the same journal (page 130) chloral hydrate, seventy-five grains to the ounce, is recommended to be used locally.

At the Cincinnati meeting of the Western Academy of Homœopathy, May, 1878, hydrastis canadensis and potassa fusa were recommended locally, and five-drop doses of tincture of phytolacca three times per day, by the author of a paper read upon that occasion.

In the Cincinnati *Medical Advance*, September, 1878, (page 248) a contributor recommends the use of fifteen grains of quinia for the cure of intermittents, with which he claims to have been successful after failing in many cases with attenuated remedies. In the same article he alludes to a homœopathic practitioner who reports a large number of cures with high potencies, but says that "*The glory of his achievement was somewhat dimmed when it became known that he used at the same time a tonic which contained large quantities of quinia!!!*"

An article was published in the Cincinnati *Medical*

Advance for September, 1878, on the subject of malignant diphtheria, in which the writer claims that this disease is identical with scarlatina. He says: "Malignant diphtheria becomes merely a severe scarlatina under the action of potassa chlorate. . . . . The dose being relative and not absolute. . . . . The quantity should be increased to the point of producing the eruption. Give the saturated solution sufficiently often and in sufficient quantities for a dose to bring out the eruption, and your patient is saved. The case is converted from a malignant diphtheria to an ordinary scarlatina, with a great tendency to recovery."

In a partial report of a case, in the same article, after enumerating the symptoms, he says: "If aught is to be done here, I must work rapidly, heroically, because these symptoms point ominously to a fatal termination. *Kali. chlor. sat. solution*, one teaspoonful every hour from five P.M., until ten A.M., to-day. At that time at least *forty grains* of the drug will have been given to a babe of two years."

Forty grains of chlorate of potassa in less than eighteen hours!! Just think of it. If these forty grains of this crude material were carried up to the thirtieth potency, and every inhabitant of the earth from its creation to the present moment had devoted his entire existence to the task of swallowing pellets, the amount consumed up to the present time would not be missed! And if carried up to the one thousandth potency, a new

universe would have to be created and exist throughout an eternity to consume it.

But this latter gentleman ought to be encouraged to go on. According to his opinion forty grains of chlorate of potassa will change one specific disease into another of less malignancy. Diphtheria, which is a specific, acute, infectious disease, and consequently propagated by its own specific contagium vivum, is changed into another specific, acute, infectious disease, which is also propagated by its own specific cause, by the simple administration of forty grains kali. chlor. (!)

This young man ought by all means to continue his investigations. He may be able to discover something that will convert smallpox into itch; typhoid fever into a mere febricula; consumption into a bad cold; hydrophobia into hysteria, and so on. Go on young man! The medical world awaits the results of your researches with bated breath!

This man is a graduate of the "Indiana Medical College;" has been an eclectic, and is now (1879) president of the State Institute of Homœopathy of one of our prominent Western States; so I presume his orthodoxy in homœopathy will not be questioned.

The following extract is from the "Cincinnati *Medical Advance*," May, 1880.

In reviewing the Annual Report of the Board of Trustees of the Ohio Institute for the Education of the Blind, for 1879, the editor says:—

"For this interesting volume we are indebted to the physician of the institution. He is a warm personal friend of ours, and has been for years a recognized member of the homœopathic medical school. Dr. F. has been in charge of this institution about two years. He reports: 'The institution has been blessed with good health, with the exception of the month of December, when there were eight cases of typhoid fever. One malignant case was fatal. Considering the feeble constitution of the blind, their health is above the average.' This, we agree, is a good showing for two hundred and forty-three pupils, a small portion of whom, however, were probably on the sick list. As the report of the superintendent is very full in the matter of disbursements, we turn with some good degree of interest to the hospital stores, and, to our amazement, we make out the following:—

"Arnica (tincture probably), $5.50; castor oil (two gallons and a jug), $2.35; Wheeler's elixir (quantity not stated), $47.50; Medicines (sundries from drug store), $15.95; opium tincture, $1.25; pills (quinia, cathartic, etc.), $27.25; prescriptions (sent to drug store), $21.65; bromide of chloral, $8.75; paregoric, $8.20; Rochelle salts, $4.40; St. Jacob's oil, 50c.; syrup squills, $2.10; syrup ipecac., $2.25; Fenton's sarsaparilla, $2.00; alcoholic liquors, $14.25.

"The total amount charged to medical stores, of which the foregoing is a part, is about two hundred and seven dollars and eighty cents. And all this in the year 1879. Our object in calling attention to this is to show Dr. F. how badly he is being imposed on. It is simply impossible that these things are being used by his order or with his knowledge. Dr. F. is a homœopathic practitioner, and could make no use of such articles. An allopath might and would, but a homœopath never. One would think constipation a raging epidemic to look at the castor oil, Rochelle salts and cathartic pills, that have been apparently poured down the throats of the poor blind children. Paregoric, eight dollars and

twenty cents worth! There is no evidence in the exhibit that any homœopathic medicine was used in the institution."

It is not fair to presume that this bill of drugs was bought by the Doctor's allopathic predecessor, especially after admitting that the total amount expended for drugs was $207.80—all in 1879; and the Doctor *having had charge of the institution for two years.*

A short time since the County Hospital of Sacramento, California, was in charge of homœopathic physicians and surgeons. Quite recently they have been relieved from further attendance by the managers, and strange to say the principal charge against them was *the extravagant expenditure of money for drugs.* Among the items are to be found *three pounds of salicylic acid* and *four thousand grains of quinia.*

R. Ludlam, M.D., a professor in the Hahnemann Medical College and Hospital of Chicago, reports the *After-treatment* of a case of ovariotomy, in *The Clinique,* August 15th, 1880.

The report of this case extends over a period of some twenty-five days. The temperature, pulse and other symptoms are carefully recorded. The treatment prescribed consisted of the usual stereotyped, orthodox, homœopathic remedies such as *Bell*^{3}, *Aconite*^{3}, *Merc*^{3}, *China*^{3}, *Bry*^{3}, *Rhus. Tox*^{3}, *Verat. Vir.*^{2}, *Ars.*^{200}, etc., *together with the daily administration of six or eight grains of quinia. The patient also received once, and*

sometimes twice per day, from the one-twelfth to the one-sixth of a grain of morphia hypodermically. But I will append the professor's exact words :—

" . . . From the seventh day, when suppuration began, to the eighteenth day, she took six grains of quinine daily. Then the signs of abscess appearing, she took eight grains daily. Morphia was given hypodermically every night, commencing with one-twelfth of a grain, and increasing it to one-sixth of a grain. A compress, saturated with carbolized cosmoline and glycerine, has been kept constantly on the wound since the clamp dropped off.

" . . . I ought to tell you that it is not my habit to continue the use of morphine as we have done in this case. My custom has been to prescribe a single dose of it, to be given hypodermically the first night after the operation, in order to insure the necessary rest and sleep, as well as to antidote the unpleasant effects of the ether. But I have rarely found it necessary to repeat it more than once or twice. In this case, however, it was a question whether, in her weak state, with a prospect of exhaustion from lack of nourishment, we could safely allow her to flounder about and waste her strength through worry and unrest. For she had no strength to lose, and we were obliged to economize her resources for the repair of her wound, and for her final recovery.

" We were satisfied that the morphia did not disagree, or do the least harm in this case because its effect was most grateful, and in every instance she awakened in the morning thoroughly refreshed, with a falling temperature, a stronger pulse and a better appetite than she had at any other time during the day or night. I did not prescribe it with a view to abort or to mitigate the peritonitis ; for I am satisfied that in bryonia, belladonna, rhus. tox. and terebinth. we have better remedies than opium for the peritonitis that is incident to ovariotomy. * * * * * * * *

"There were two indications for the quinine, viz.: for its tonic effect in supplementing the appetite and on account of its anti-purulent properties. Given in doses of two grains it did not produce the least degree of cinchonism, nor did it prevent suppuration."*

* * * * * *

If the attenuated homœopathic remedies which are interspersed throughout the report of this case were expunged, leaving nothing but the morphia and quinia, with the reasons assigned for their administration by Professor Ludlam, the treatment pursued would be accepted at a clinic of the most fastidious so-called "*regulars*" without serious criticism. It is the customary practice now to prescribe morphia in almost every case after this operation; and in nearly all quinia is used extensively. In what few cases I have operated upon, those two articles have constituted the principal medicines used in the after-treatment.†

Professor Ludlam occupies a conspicuous place in the school of homœopathy especially in the Northwest. He is a member of the faculty in a prominent college of that faith, and is referred to with pride by the disciples of Hahnemann, as an author and teacher. Hence, his teachings and sayings carry with them the weight of authority; yet the practice pursued in this case was clearly *antipathic*, and not *homœopathic;* for every principle of the latter school was violated; the law of similars, dilutions, the single remedy, local applications, etc., etc.

* *The Clinique*, page 259.

† See *American Practitioner*, May, 1880.

I wish to call attention to a specimen of homœopathic honor and honesty, in the management of the hospital under their charge, upon Ward's Island, taken from the New York *Medical Gazette*, May 22d, 1880:—

" . . . . For the present, however, we pass this matter by, for the purpose of calling special attention to one of the most shameful transactions that any person with a vestige of honor could be cognizant of without denouncing it in the strongest terms, or else sacrifice his self-respect. We speak of the manner of conducting affairs at the Homœopathic Hospital on Ward's Island, narrated below. This thing has gone on for three or four years and it is about time that the responsible parties, the incompetent and ignorant Commissioners, should be called to an account.

THE HOMŒOPATHIC HOSPITAL.

"Some six months ago our attention was called, by one of the inmates, to certain abuses which were being carried on in the Homœopathic Hospital, on Ward's Island. At first we thought that the statements were made vindictively, believing that no matter how much the homœopaths might differ from us in matters purely medical, they still were *gentlemen* and had as keen a sense of gentlemanly honor as any of us. It seems, however, that among the lights in the homœopathic ranks there are to be found men who will stoop to do and to sanction acts so contemptible that the greatest criminal would blush to be thought guilty of. And yet these men call themselves gentlemen.

"We have of late been investigating the charges, with a view of collecting proof sufficiently overwhelming to justify us in bringing the matter before the legislature, but the ubiquitous newspaper reporter has given the whole story to the public rather prematurely for our plans. Here it is, copied from one of our leading dailies:—

"'On Ward's Island is the Homœopathic Hospital. The building used for this hospital was originally built in the time of the Tweed Ring, and fabulous amounts of money have been squandered upon it. First it was an inebriate asylum, and $800,000 were spent upon it. Next, it was the Soldiers' Retreat, and it is supposed that a similar amount was squandered in fitting it up as such. The building being vacated by the soldiers in 1874, the friends of the homœopathic school of medicine thought their turn was next. So, a tremendous political pressure was successfully brought to bear on the Commissioners to furnish the building for the homœopaths. This was the first public hospital ever secured by the homœopaths, and it is costing the taxpayers of the city $60,000 a year. The homœopaths, so it is alleged, discovered that the convalescent patients at the other hospitals got passes to go to and from the city, and at once utilized this discovery. Instead of giving passes the applicant was told to go and when returning to call at the Commissioners' office and get a new permit. Thus, it is said the same patient often counted as two, three, four or more patients admitted. Numbers of them were sent out in this manner a dozen times. By this means the admissions and discharges (as cured) were increased 300 per cent., and the percentage of deaths of course was correspondingly low. The mortality in the three leading hospitals the first year after the homœopathic started was, Bellevue Hospital, 12½ per cent.; Charity Hospital, 8½ per cent.; Homœopathic Hospital, 6 per cent. On the publication of this result homœopathic organs grew jubilant. The same course was pursued the ensuing year, and the result (on paper) was about the same, while all the time the actual percentage, it is declared, was about eighteen. After nearly three years of this adroit management the Commissioners began to find it very troublesome to be issuing so many fresh permits to the same individuals, so an order was issued to let parties wanting passes have them. But the homœopaths were equal to the emergency, and the next

device, it is alleged, was to discharge the sick and keep the healthy in the building. This piece of strategy, it is said, has been carried out during the past year, and when the annual report for 1879 is published, the mortality report of the Homœopathic Hospital will once more appear (on paper) astonishingly low.'

"'Comment is unnecessary. Homœopathy has of late years made many attempts to commit suicide. Let us hope that such nefarious practices as that recorded above will save it the trouble of another attempt.'"

In the *Medical Press and Circular* for September 15th, 1880, an English journal, is published the following extract from a correspondent of the *Chemist and Druggist*:—

"'Homœopathy is either a huge lie or a Divine truth,' so its professors tell us, and I for one am willing to acknowledge it so; but which of the two may be explained by the following case:—

"A lady suffering from neuralgia recently went to a celebrated 'homœopathic' (?) physician in the West End. The following were the prescriptions given:—

(1.) ℞. Quin. sulph. solub., gr.iv
Fiat pulv.
To be taken four times a day.

(2.) ℞. Lin. belladon. (B.P.), ℥ ss
Chloroformi, ℥ ss
Nepenthe, ℥ j. M.
Fiat linim.

(3.) ℞. Allen & Hanbury's "Perfected" cod-liver oil, ℔ss.

(4.) ℞. Quin. sulph., gr.xlviij
Sp. chloroformi, ℥ j
Sp. vini rect., ℥ j
Ac. hydro. dil., q.s.
Aq., ad ℥ iv.
A teaspoonful three times a day.

(5.) ℞. Liq. strych. nit. (1-200), ℥ iiss
Ac. nit. dil. (1-10), ℥ iiss
Aq.. ad ℥ iv.
A teaspoonful three times a day, in water.

"The whole of these medicaments were to be used concurrently, except Nos. 4 and 5, which were to be used alternate weeks.

"I myself saw the prescription in question, so can vouch for the truth of this statement. Verily 'homœopathy is a huge lie.'"

If this is a fair example of homœopathic practice all candid persons will be compelled to indorse the conclusion of the correspondent. *All the important principles* of the school are violated in these prescriptions.

CHAPTER XVI.

Summary—Similia—Kidd's Laws of Therapeutics—Contraria Contrariis—Galen's Law—Cases from Kidd's Practice—Totality of Symptoms and Pathological Lesions—Similar Diseases Associated in the Same Individual—Natural Diseases Essentially Dissimilar—Pathology of No Use in Selecting a Remedy—Drug-Disease—Domain of Similia—Propositions, Discussions and Conclusions—Chemical, Mechanical and Physical Forces—Tonics and Restoratives—Metaphysical Discussions on Therapeutical Laws—Slow Advance of Homœopathy in Old World—International Hahnemannian Association.

It will be seen by the perusal of the preceding pages that homœopathy has departed widely from the original principles taught by Hahnemann. A process of evolution has been going on and will continue until the most objectionable principles of the school will be eliminated. This has been effected to a great degree in regard to Hahnemann's spirit-like pathology and etiology. Also to provings, the single remedy and dilutions and triturations. Dynamization by agitation has also been abandoned by homœopathists who have any knowledge of physical forces. Psora, that "monstrous miasm," as a cause of chronic disease, is seldom mentioned now; while the administration of medicine by *olfaction* has been almost entirely discarded by even those who claim to be pure homœopathists. In truth, there is but one

plank remaining in the entire platform of homœopathy, the law of similars, and even it has begun to give way. The divinity of this law, which Hahnemann claimed, is now seriously questioned by some of his followers.

Dr. Kidd, in his "*Laws of Therapeutics*," abandons everything claimed by homœopathy, excepting the principle of "*similia similibus curantur*," but does not claim even this to be a universal law:—

"Twenty-seven years ago I saw that the essential truth of Hahnemann's law was totally independent of his speculations about dynamization. Adopting with great delight the law of 'similia similibus curantur' as the chief, though not the only, foundation for therapeutics, I learned for myself that Hahnemann's 'sober' teaching, the use of the pure, undiluted tinctures, was a far better guide to heal the sick than Hahnemann 'drunk' with mysticism, calling for the exclusive use of infinitesimal doses. The latter I gradually cast aside *in toto*, as untrustworthy and unjust to the sick, whose diseases too often remained stationary under treatment by globules, but were most effectually and quickly cured by tangible doses of the same medicines which failed to cure when given in infinitesimal doses."*

"The physiological action of medicinal agents stands in some positive relationship to its curative action in *disease*. In most cases that relationship is either of similarity or of contrariety. Some few instances seem to stand out, as of no apparent relationship, but they are few, and deeper investigation brings them in amenable to one or the other. Each law has its own way or behavior, so to speak.

"Looking to the observation of facts, apart from the theoretic speculations, two primary laws of therapeutics unfold themselves. As Galvani and Faraday have

* Kidd's Laws of Therapeutics, page 35.

afforded names for Galvanism and Faradism, those two laws of therapeutics may well be called Galen's law, or the antipathic, founded upon the rule of "contraria contrariis," and Hahnemann's, or the homœopathic law, founded upon the relationship of similars.

"When the relationship of the medicinal action is contrary to the signs and symptoms of disease, it is necessary to give doses large enough to produce the full physiological or primary action. . . . . ."*

"Rejoicing to enlarge the boundaries of knowledge, true science cannot ignore any law, though its sphere of action be limited and not of universal application. Galen's law of 'contraria contrariis' has its place, and a very prominent place, still in the practice of every physician. The therapeutic action of certain medicines seems to lie altogether, or nearly so, in that direction. . . . . ."†

Dr. Kidd reports numerous cases from practice which he claims to be sufficient to establish the law of similars. Some of these cases are both amusing and instructive, but I must confess that my faculties of generalization are not sufficient to enable me to deduce any general law of therapeutics from a perusal of them.

"*Exophthalmic Goitre.*—A young lady (Miss E.), aged twenty-four, was brought to me in 1850, suffering from enlargement of the neck, throbbing and distention of the eyes, which looked as if protruding from their sockets; she also complained of distressing headache. For some months she had been under the care of the family attendant at Canonbury, who administered small doses of iodine. The patient getting no better, this gentleman took her to the late Sir B. B., who prescribed large doses of iodide without any relief. She then consulted Dr. C. J. B. W., who prescribed iodide of iron;

* Kidd's Laws of Therapeutics, page 82. † Idem, page 103.

this aggravated the headache, and did not relieve the enlargement of the neck, nor the distended eyeballs. She then consulted me; I recognized the disease as exophthalmic goitre, from Dr. Graves's admirable description, although up to that time I had never treated a case of it. I knew that belladonna caused, in the healthy human subject, headache, with throbbing in the head and eyes, with vascular excitement. Of this I prescribed four drops of the tincture three times a day. It afforded immediate relief to the headache, gradually lessened the swelling of the neck and the protrusion of the eyes. It was taken regularly for about six weeks, and the cure proved permanent, one of the most satisfactory I ever witnessed. In the treatment of exophthalmic goitre this case is, I believe, the first case of the successful use of belladonna in that disease. I published this case in the *British Journal of Homœopathy*, vol. xxv, in 1867."*

Here is a grave pathological lesion which gives rise to a certain group of *disordered sensations*, called the "totality of symptoms," in accordance with which the tincture of belladonna is prescribed, the real pathological condition being ignored. This totality of symptoms is not confined exclusively to this disease, but may be, and frequently is, present in other diseased conditions of the system; and under the law belladonna would be equally appropriate. If this case was cured by the operation of a general law, the cure in all similar cases ought to be the rule and failure the exception. This case was treated by Dr. Kidd in 1850, and published in 1867; his work on the *Laws of Therapeutics* was published in 1879. Why did he have but one case to report? Why

* Page 94 of Kidd's Laws of Therapeutics.

have not our magazines been teeming with cures of exophthalmic goitre by the administration of tincture of belladonna? The natural inference is that this case was the exception and not the rule, and that the facts are bad for the divine law of similia similibus curantur; and the truth is that the cure in this case will have to be attributed to some other influence than that of the belladonna.

"Miss ——, aged nineteen, suffered for three years, all through the summer, from the worst form of hay asthma, producing sneezing, coryza, redness of the eyes, dyspnœa, with dry wheezing and cough. In the beginning of the summer of 1868 she consulted me. I prescribed arsenic (Fowler's solution), four drops three times a day, with immediate benefit; so much so that she was enabled to live in London (Euston Square) all the summer. The occasional use, for three or four days, of the arsenic kept her in perfect comfort, although the previous three years she found no relief till she went to the seaside."*

This is certainly another exception to the rule, for who has not habitually prescribed Fowler's solution for hay fever? I have not treated a case of this disease, for twenty years, without, at some period during its management, having administered this remedy, and have never succeeded in producing anything more than temporary relief, and frequently not so much as that.

"A gentleman, A. S., suffered for upwards of a year from sciatica; the pain he described was an aching *numbness* along the course of the sciatic nerve. He had used medicines internally and externally for a year,

* Page 94 of Kidd's Laws of Therapeutics.

baths of various sorts, galvanism, without any but temporary relief. I prescribed four drops of tincture of aconite three times a day. After three days there was no appreciable relief, when the dose was increased to six drops, yet without result. Satisfied with the essential relationship of the numbness which aconite always produces to the numbness of his sciatica, I ordered him to increase the dose to seven drops. This quickly and permanently cured this disease of upwards of a year's duration. 'About half an hour after I took the seven drops,' the patient said, 'a peculiar thrill shot into the thigh and leg of that side *increasing the numbness.*' He took two doses more, of seven drops each, and was perfectly cured; thus, although the relationship of the medicine was similar to the disease, the small dose was insufficient to cure."*

Unfortunately for suffering humanity this case is certainly an exception, for to cure sciatica with aconite is not the rule. A general law should be more universal in its application. It is not claimed for this law that there is any similarity in pathological lesions between what homœopathists claim to be the drug-disease and the natural disease to be treated. The similarity is confined to the "*disordered sensorial condition.*" The real lesion is entirely ignored, and hence the same remedy is prescribed for a great variety of diseases totally different in their etiology and pathology, provided the totality of symptoms is similar to the pathogenetic symptoms caused by the provings of the drug.

It is now a conceded fact that diseases (real pathological conditions) which have heretofore been considered

* Page 109 of Kidd's Laws of Therapeutics.

similar to each other, both in symptoms and lesions, may be and frequently are associated together in the same individual. It is certain also, that under these circumstances neither disease has any tendency to relieve the other, but adds greatly to the danger already present. The acute infectious diseases are frequently associated in this way; such as measles and scarlatina, diphtheria and scarlatina, diphtheria and measles, malarial and typhoid fever, relapsing fever and measles, and so on, almost through the entire list. The disordered sensations present, the subjective and objective symptoms, together with many lesions, are similar or are common in these diseases when associated in the same individual case; yet the presence of each additional disease only adds severity to the symptoms and increases the danger to the patient. Even the same specific disease may and does differ widely in different individuals. Take scarlatina, for example, which is usually divided into three varieties, the simplex, the anginose and the malignant. In prescribing for this disease the homœopath would be governed by the totality of symptoms, which would be different in each class of cases, ignoring the specific cause or special pathology of the disease and closing the door against specific treatment, although in some parts of the world the name of the specific school of medicine is claimed. There can be no real similarity between natural diseases or diseased processes. They are either identical or dissimilar, and the difference is one of degree only. I

think the proposition might be laid down, without fear of successful contradiction, that *all natural diseases are dissimilar*. Suppose, to illustrate this proposition, we take a point on a circle and agree that all diseases which can be arranged upon this point are identical. Let us place upon this point scarlatina, for an example. All cases of this disease being caused by the same specific poison, we will say are identical, although they may differ widely in their totality of symptoms. Now, as we proceed to arrange our diseases around this circle according to the resemblance they are supposed to have with the one with which we began, suppose we take for the next example diphtheria, another specific disease caused by its own contagion; and we will concede, for the sake of the argument, that this is a similar disease to scarlatina; yet the two are not *identical, and consequently must be dissimilar*. They differ in etiology, symptomatology, pathology, invasion, duration, termination and sequelæ. Yet the *similitude of symptoms* made up from the "*disordered sensorial condition*" of the patients is *similar*, and forms the basis for the homœopathists' therapeutical procedure.

Continuing this arrangement we would perhaps select measles, German measles, roseola, variola, etc., and place them at points upon this circle according to their supposed *similarity or dissimilarity*, until we arrive at a point directly opposite that selected for identity, and here we have the greatest degree of *dissimilarity;* but

all diseases between these two points are *essentially dissimilar and differing only in degree.* But if *similarity* is conceded for those diseases nearest the point of identity, then *all* diseases are *similar,* the difference being one of *degree* only, for no man would be able to draw the line and decide where *similarity* ends and *dissimilarity* begins.

If these diseases are similar and there is any truth in the law of similars, how easy it would be to cure scarlatina by infecting the system with the virus of diphtheria. But where is the homœopathist who, in his silliest day, would undertake such a hazardous proceeding? But, says the homœopathist, "It is not the changed tissue, but the dynamic condition which produces the change. This is the thing to be treated."*

"Pathology is not without its use, but that use is not in the problem of selecting the most appropriate remedy. Pathology does not, indeed, often tell us whether a new symptom is of favorable or unfavorable import, and hence whether it requires to be treated or not; but in the actual selection it is not of the slightest value, not only because it is theoretical, and hence more or less uncertain, but because, even at its best, it can only generalize, and not individualize." †

The homœopathists do not propose to substitute one natural disease or pathological lesion for another, but an artificial *drug-disease,* which must be stronger than the

* President's Address at American Homœopathic Institute, June, 1880.

† From an Address by E. W. Berridge, M.D., joint editor of the Organon, one of the leading English homœopathic journals, before the American Institute of Homœopathy, at Milwaukee June, 1880.

natural disease, and although the vital force is unable to remove this natural disease, it is perfectly competent to overcome the more powerful drug-disease after it has accomplished the removal of the said natural disease! *Therefore the vital force is unable to contend with the weaker natural disease, but is abundantly able to vanquish the stronger drug-disease!!*

In discussing the *domain of similia,* in a recent number of the *Hahnemannian Monthly,* Doctor Dake lays down some propositions and draws conclusions therefrom, which I propose to insert here; coming as they do from a homœopathic writer of recognized ability, they are doubly interesting.

"Most of the opposition to the acceptance of the homœopathic principle among medical men of education and candor, as well as much of the dissension among those who claim to recognize it as a practical guide, has come from a misapprehension of the field and the means embraced under its control.

"Exceedingly misty, and many times absurd, have been the conceptions of it, as placed before the public by medical writers.

"I am persuaded that a great number of men who assume the position of leaders in medicine, as well as in other departments of human learning, and who talk and write much of *principles* and *laws,* fail to have a definite idea of what is expressed in those terms. Some seem to regard physical principles as 'heaven-born' and revealed to man from above and beyond and independently of his own studies and endeavors, as ordinances at once infallible and universal. They would require an unquestioning acceptance of such revelations, and a childlike adoration of the persons through whom they are made known."

"It is clear that such leaders are mistaking the natural for the supernatural, and the scientific for the religious. . . . . .

"Now, in medicine, I need not here speak of the classification of drugs and the deduction of therapeutic principles from clinical experiences, and the formation of systems and schools.

"Suffice it to say that Hahnemann discovered the universality of the principles expressed in the terms *similia similibus curantur;* that affections in the sick are removed by agencies capable of inducing similar affections in the well.

"The term *universality*, in this connection, does not imply that Hahnemann's principle was ever supposed by him to apply to everything in the universe, nor even to all the diseases of human kind.

"He knew, better than many of his followers seem to know, the limitations of his law.

"Professor Jevons says: 'In a scientific point of view general principles must be universal as regards some distinct class of objects, or they are not principles at all.'

"Now we come to consider in regard to what class of objects the homœopathic principle is universal.

"Advancing by the method of exclusion I may say:

"1. That it relates to nothing but affections of health.

"2. That it relates to no affections of health where the cause is constantly present and operative.

"3. That it relates to no affections of health which will cease after the removal of the cause by chemical, or mechanical, or hygienic means.

"4 That it relates to no affections of health occasioned by the injury or destruction of tissues which are incapable of restoration.

"5. That it relates to no affections of health where vital energy or reactive vital power is exhausted.

"6. That it relates to no affections of health the likeness of which may not be produced in the healthy by medicines or other agencies.

"I need not stop to explain nor enforce these propositions, since they must be apparent to every reader at all versed in the writings of Hahnemann and the general literature of homœopathy.

"Looking over the field of human ailments, now, to see what is left after the exclusion of all the classes I have mentioned, we find yet one class, namely, *human affections similar to those producible by medicines and other agencies, existing in organisms having the integrity of tissue and reactive power necessary for recovery, the efficient causes of the affections having ceased to operate.*

"Here we find the domain of *similia*—the distinct class of objects, the affections, regarding which it is a *general principle,* and in the treatment of which it is a *universal law.*

"And looking again, this time in the direction of medicines and other agencies capable of influencing the human organism, as to health, and advancing as before, by the method of exclusion, I may say—

"1. That Hahnemann's law relates to the action of no agents affecting the organism chemically.

"2. That it relates to the action of no agents affecting the organism mechanically.

"3. That it relates to the influence of no agencies affecting the organism hygienically.

"4. That it relates to the action of no agents destroying the parasites which infest or prey upon the human organism.

"I presume I need not spend time to demonstrate these propositions. They cannot be disputed.

"Looking over the armamentarium of the therapeutist, for the agents not excluded, we find one class remaining, namely: *those agents which affect the organism, as to health, in ways not governed by the laws of chemistry, mechanics or hygiene, producing ailments similar to those found in the sick.*

"Here we come to the domain of *similia* again, by a different route, and find the distinct class of agents re-

garding the action of which, in disease, it is a *general principle,* and in the employment of which it is the *paramount law.*

"When the therapeutist comes to the use of this class of means, in the treatment of the class of ailments which I have shown to be in the domain of *similia,* he must recognize and faithfully obey Hahnemann's law or fail in the accomplishment of cures.

"And when he employs this class alone, in affections calling for chemical antidotes, or mechanical measures, or hygienic influences only, he is invading another domain and infringing other laws, and must experience miserable and disgraceful failures.

"As well might the botanist attempt to follow a principle in optics, or the mineralogist a principle in biology, in the pursuit of his occupation.

"*Similia* has its peculiar domain, in which it is a general principle, and its system of medical practice in which it is a universal law.

"Outside of that domain it has no applicability, no meaning, and is simply nothing.

"Extravagant claims in its behalf do but mislead its votaries and disgust men of learning and candor, to whom it will be in the future, as in the past, a stumbling block in the way to homœopathy.

"It may suit the cunning partisan, fattening upon sectarian differences, and the zealot, of contracted vision and enthusiasm infinite, to toss their hats and shout, in the face of all learning and honesty: '*Similia! the all in all of therapeutics! we want nothing but* SIMILIA!!'

"But they who appreciate principles in science and laws in nature, are sober, modest, and friendly—patient, persistent, and progressive—as ready to forsake the false as to embrace the true, and always satisfied that the right must prevail."

These propositions and conclusions of Dr. Dake, if accepted, settle the entire question of homœopathy, and concede almost every point which I have attempted to

establish; not in regard to similia similibus curantur only, but also triturations, dilutions and dynamization.

It requires no evidence from my hands to prove that all medicines which have *any* action upon the human system act either *chemically, mechanically* or *physically;* in truth they are simply physical forces, and are strong for good or evil in direct proportion to their power of impressing themselves upon and modifying the cell action of the constituent parts of the body. It is in this way that they modify the so-called vital force.

It is conceded that this law relates to no agent which affects the organism chemically, mechanically or hygienically, and of course, no sanitary measures can be adopted under its operations. The use of all disinfectants and other chemical or mechanical means for destroying disease germs or disease producing agents of whatever kind, is clearly not homœopathic.

It certainly would be a piece of folly to attempt to destroy the noxious agents germinating in a cesspool, privy vault, foul sewer, or a contaminated water supply with *any* quantity of a dynamized drug; for whatever may be the modus operandi of these medicines when taken into the system, they certainly are nothing but physical agents when used as disinfectants, and act *chemically, mechanically* and *hygienically.*

If a dynamized drug selected under the law of similia is of no force external to the body in destroying disease germs, why expect it to accomplish more by administer-

ing it internally, after the germs have been absorbed and found a lodgment in the fluids and solids of the body? The writer further says that "the law relates to the action of *no agents destroying the parasites which infest or prey upon the human organism.*" Now, if the germ theory of disease should prove, upon further investigation, to be the correct one in regard to the acute infectious diseases, it would place our brethren of the homœopathic school under embarrassing circumstances, after the promulgation of this fourth proposition, which the writer says is "so plain it cannot be disputed," because the establishment of this theory places this class of diseases among the *parasitic*, and consequently removes them from the *domain of similia*, which is a proposition so plain that I agree with him when he says it "*cannot be disputed.*"

A closer examination and analysis of Dr. Dake's propositions narrows the domain of similia, according to his own view, to almost nothing. He states (2) *that "This law relates to no affections of the health where the cause is constantly present and operative.*" This excludes from its domain all hereditary diseases and diatheses, as well as those caused by climatic influence and occupation. No. 3 removes all cases which would recover by the unaided efforts of nature, or the *vis medicatrix naturæ*. No. 4 eliminates all cases which are incurable because of such lesions as cancer, tubercle, destruction of organs from the action of chemical or me-

chanical agents, etc. No. 5 removes from the domain of the law all "affections of health where vital energy or reactive vital power is exhausted." The discussion of this point calls to mind one of the most serious objections to homœopathy, not only to the law of similars, but to triturations and dilutions. Food, drink and stimulants are certainly as much entitled to rank as therapeutic agents as medicinal substances, for a patient's life may depend upon the timely administration of these articles, and no homœopathist will claim that they can be dynamized by dilution or given the patient in accordance with similia.

The restorative or tonic plan of treatment which is so popular and necessary to success in the treatment of a large class of diseases is a stranger to homœopathy, and this school cannot avail itself of its advantages. There may be, and frequently is, a deficiency of some of the normal elements which go to make up the tissues of the body. The salts of iron, potassa, soda, lime, phosphorus, sulphur, the albuminous compounds derived from nitrogenous food, water and other substances, may have to be furnished in liberal quantities and introduced into the system rapidly; even transfusion of blood may be necessary, or our patient perishes. How will homœopathy, with its *attenuated single remedy*, under the law of *similia similibus curantur*, meet this emergency? Manifestly, not at all.

The conclusion of this matter is about as follows:—

The law of similars is not applicable to the cure of diseases where a *chemical, mechanical,* or *physical* cause is necessary for their production or relief. All therapeutic agents are *chemical, mechanical or physical forces.** Therefore, the law of similars is not applicable to the cure of disease by the use of *therapeutic agents.*

It is time all metaphysical discussions and theoretical speculations in regard to laws of therapeutics were forever discarded. This is an age in search of facts and not fancies. The experiences of the last twenty-five centuries have convinced us that there is no law of therapeutics which can be universal, and there can be no specific dogmas connected with this subject sufficiently broad and comprehensive upon which to found a system or school of medicine.

The foundation of scientific medicine should be laid broad and deep, sufficiently so to enable it to absorb everything good, no matter from what source it comes, and reject everything bad with the same freedom.

Homœopathy, as taught by its founders, was essentially a narrow-gauged affair, as all purely dogmatic schools always must have been. The progress of homœopathy has never been satisfactory to its friends in any country save the United States. In this country, where the utmost freedom abounds, there is no law to prevent a man from being a fool himself, or patronizing one in any business in which he may choose to engage.

* Preceding chapter.

"How Can we Best Advance Homœopathy?" was the subject of an address delivered before the American Institute of Homœopathy, at Milwaukee, June, 1880, from which we insert some extracts:—

"It cannot be denied that homœopathy has not advanced, and is not advancing as rapidly as we could desire, nor as rapidly as we once had just and reasonable grounds for expecting it to advance. In the United States, where it has taken the firmest root, and where its spreading branches the most widely overshadow the land with healing in their leaves, the old school is yet triumphant in point of numbers; and to this day the rules of medical trades-unionism, euphemistically called 'professional etiquette,' are brought to bear upon us by our opponents. In Great Britain we have but two hundred and seventy-five avowed homœopathic physicians, and this number includes not a few who have not the slightest claims to this honorable title; and while there are many colleges and universities empowered by the State to grant degrees in medicine, we have not one legally recognized school of homœopathy. On the Continent matters are in the same unsatisfactory condition. Except in the United States, and for the last few years in Great Britain, there seems to be everywhere stagnation, if not retrogression. It ought to be far otherwise. More than forty years have elapsed since Hahnemann penned the fifth edition of his Organon; more than eighty years since he first announced the law of Similia, and yet how little fruit has his life work borne in comparison with what should have been. Why is this? To what causes are we to attribute the fact that the profession and the public have not more universally accepted homœopathy.

"There are those nominally among us who have a stereotyped answer to this question. Hahnemann, they say, was too dogmatic, too uncompromising, too visionary; and as a panacea for all the unbelief which now

pervades the allopathic mind, they recommend that we should give up what they call our 'sectarian attitude;' that we should drop and disavow the name of homœopathy; that we should repudiate as untenable that which they term the extravagances of Hahnemann, such as his doctrine of chronic diseases, etc., and finally that we should claim for similia similibus curantur, not the position of a universal law, but only that of a very good and useful rule of practice to which there may be many exceptions.

"Such has been the effect of our wavering upon the minds of our allopathic brethren; what effect has it had on ourselves? Ever since that fatal error was committed by one whose memory we nevertheless hold in honor, of proclaiming "absolute liberty in medical opinion and action," a change for the worse has taken place in our own ranks. Ever since that time the name of Carroll Dunham has been held to sanction every kind of empiricism; forgetting that he himself in his teaching and practice was a true Hahnemannian, men have eagerly caught at his well intentioned, though mistaken, perhaps misunderstood, words, and ever banded themselves together to overthrow those that remained true to the teachings of the Master. I need not recount the various phases of the struggle, they are all well known to you."

Carroll Dunham's address was only the exciting cause of the schism which took place in the ranks of homœopathy. It had been gathering form for a long time, and must have come sooner or later; in fact, it could not have been delayed much longer. There are now two wings to the school, the liberals and the straight jackets. A house cannot stand which is divided against itself. The liberals will necessarily become eclectics and the straight-jackets will return to Hahnemannism, pure and

unadulterated. Preliminary steps to accomplish this step have already been taken.

During the meeting of the American Institute of Homœopathy, at Milwaukee, June, 1880, *The International Hahnemannian Association* was formed, which adopted the following platform of principles:—

"WHEREAS, We believe the Organon of the healing art as promulgated by Samuel Hahnemann to be the only reliable guide in therapeutics; and

"*Whereas*, This clearly teaches that homœopathy consists in the law of similars, the totality of the symptoms, the single remedy, the minimum dose of the dynamized drug, and these not singly but collectively; and

"*Whereas*, Numbers of professed homœopathists not only violate these tenets, but largely repudiate them; and

"*Whereas*, An effort has been made on the part of such physicians to unite the homœopathic with the allopathic school; therefore

"*Resolved*, That the time has fully come when legitimate Hahnemannian homœopathists should publicly disavow all such innovations;

"*Resolved*, That the mixture or alternating of two or more medicines is regarded as non-homœopathic;

"*Resolved*, That in non-surgical cases we disapprove of medicated topical applications and mechanical appliances as being also non-homœopathic;

"*Resolved*, That as 'the best dose of medicine is ever the smallest,' we cannot recognize as being homœopathic such treatment as suppresses symptoms by the toxic action of the drug;

"*Resolved*, That we have no sympathy in common with those physicians who would engraft on homœo-

pathy the crude ideas and doses of allopathy or eclecticism, and we do not hold ourselves responsible for their 'fatal errors' in theory and failures in practice;

"*Resolved*, That as some self-styled homœopathists have taken occasion to traduce Hahnemann as a 'fanatic,' as 'dishonest' and 'visionary,' and his teaching as 'not being the standard of homœopathy of to-day,' that we regard all such as recreant to the best interests of homœopathy;

"*Resolved*, That for the purpose of promoting these sentiments, and for our own mutual improvement, we organize ourselves into an International Hahnemannian Association, and adopt a constitution and by-laws.

The formation of this Association and the adoption of this platform of principles is a return to the pure, inflexible dogmatic homœopathy of Hahnemann.

The adoption of resolutions seems to be a favorite amusement with our homœopathic brethren. Each yearly gathering favors us with the usual supply, which are looked for and read with interest, in order to enable us to decide what homœopathy is going to be for the ensuing year.

This Association resolves to adopt the principles promulgated by Samuel Hahnemann in the Organon of the healing art as the *only* trustworthy guide to therapeutics. It resolves in favor of the law of similars, the totality of symptoms, the single remedy and the minimum dose of the dynamized drug; against mixing or alternating medicines, local applications in non-surgical cases, and further, that any violation of these tenets is non-homœopathic, and that the time has arrived for pure Hahne-

mannians to publicly disavow all connection with such innovations. This kind of homœopathy will not stand the test of recent advances in science.

INDEX.

PAGE

Absurdity of dilutions demonstrated 150
Æsculapius 26
biography of; sons of; connection with the expedition of the Argonauts 27
his deification 27
his method of curing diseases; his death 27
Ætius 59
After-pains caused by deranged vital force 128
Agathinus 42
Ages in medicine 17
Aggravations, homœopathic 106
Agrippa, Cornelius 63
Ainspach 83
Albucasis 57
Alcohol 57
Alexander of Tralles 59
Alexandria, school of 35
Alhakem the II 56
Allen's encyclopedia of pure materia medica 143
Allopath 131
Almamun Caliph 55
Almansur Caliph 55
American Homœopathist; discussion upon the internal and avoidable obstacles to homœopathy, by a homœopathist; potencies; materia medica and pathology 175–179
American Institute of Homœopathy 214
Amida 59
Amulets 27, 48
Anatomy of Galen 48
failure of the empirics in the study of 88
practical, at Alexandria 36
evolution of 74
revival of, by Mondini 76
Ancient dogmatism 90
Anger of the gods in producing disease 23
Anima, or soul 84, 87
Antidotes 93
Antipath 131
Antipyretic remedies; argument against dynamic force 155
Apis 23
Apocryphal books 35
Apollo 23, 26, 27

PAGE
Arabia 53
Arabian authors 56
Arabs opposed to dissections 75
Archeological evidences of civilization in America in prehistoric times 20
Archigenes 42
Argonauts 27
Aristotle 35, 43, 92
Asclepiadæ, the 28, 30, 51
Asclepiades, the founder of the methodic school, doctrines of 39, 74
Astrology 60
Atheneus of Attaleia 41
Athens, school at, destroyed 53, 92
Attenuations in pathology 102
Avicenna 56, 93

Baghdad 55
Basle 65
Bellini, Lawrence 71
Black death in Asia and Europe during the fourteenth century 19
Bodies of criminals dissected 36
Boerhaave, Hermann, system of 85
Boericke and Tafel 149
Bokharra 56
Bologna 61
Borelli, Giovanni Alphonso 71
Brown, John, founder of the Brunonian system; biography of; his opinions; death 88, 96

Cabalistic medicine, baneful influence of 63
Caliph Almamun 55
Caliph Almansur 55
Cannibalism 74
Canon, the 57
Cardan, Jerome 63
Carpi, Beringer De 77
Casserius, Julius 81
Causes of disease immaterial and dynamic 102
Celsus 41
Challenge to homœopathy 156
Charlemagne 60
Charles I. 81
Chemical school of medicine 63
Chemistry 68
Chiron, the Centaur 26
Christian church, influence of in retarding the progress of medicine 51
opposed to human dissections 76
Christianity and the Roman empire 53
Chrysaloras, Emanuel 62

PAGE
Cicero 39
Circulation of blood 81
Clinical review, quotations from 186
Clysters 25
Coction 35, 47
College of Physicians 81
Constantine, the African 61
Contrarii contrariis, Galen's Law 199
Cordova, Spain 56
Cornelius Agrippa 63
Correlation and conservation of forces 125
Cowardice of Galen 49
Crisis 35
Crotonia 28
Cullen, William, his system of medicine 86

Demonology among the Egyptians 24
among the eclectic conciliators 71
Descartes 84
Dilutionists, high and low 185
Dilutions 101, 105
manner of preparing 107
strength of 109
Dioscorides' works on materia medica 92
Diphtheria converted into scarlatina by kali chlor., a fool's theory 187
Disease a nonentity, according to Hahnemann 104
Diseases cured by Divine interposition 51
attributed to the anger of the gods by the ancient Egyptians 23
cured by prayers and incantations, etc., by the early Christians 52
Disordered condition of vital force 107
Dissections of human body legalized for the first time in the history of the world 36, 61
forbidden by the Jews, the Romans, the Greeks, Arabians and early Christians 76
Distillation introduced by the Arabians 57
Divisibility of metals 146
Dogmatic age in medicine 17
school of medicine 35, 96
homœopathy 172
Dogmatism revised by Galen 48
Domain of similia, by a homœopath 206
Draco 35
Drugs as physical or dynamical agents 158
Drug-disease 137
Dynamic force developed by shaking 106
power of drugs tested by clinical thermometer 155
force refuted 147

PAGE
Eastern empire, disintegration of 62
Eben Baithar's materia medica 93
Ecclesiastics 58, 60
Eclectic conciliators 69
school of medicine 42, 96
homœopathists 172
Ecolampadius 64
Edessa 54
Edinburg University 87
Egyptian mysteries 24
mythology 23
Embalming the dead by the ancient Egyptians 75
Empiric school of medicine 37, 74
or dogmatic age in medicine 17
Episynthetic or eclectic school of medicine 42
Erasistratus 36
Esmion 23
Eustachius 77
Evil spirits 22
Evolution of medicine 18
of anatomy 73
Expectant school of medicine 83

Fabricius 77, 81
Faith doctors 76
Fallacies of drug-provings 183
Faust 62
Folkstone 80
Food, drink and stimulants, as medicines 212
Force and matter 148
produced by agitation 149, 107
Forces of nature in diseases 124

Gaius 43
Galen, Claudius, history of 43
opportunities for distinction 44
writings and opinions of 45
his anatomy 47
his infallibility 48
his cowardice 49
Galenites 48
Generation, works on, by Harvey 81
Germ theory of infectious diseases 130
theory of diseases, and its relations to homœopathy 210
Geynes, Doctor 48
Glasgow University 86
Golden Fleece 27
Greek belief in regard to the dead 75
Greek colonies from Egypt 25
Gutenburg, John 62
Gymnosophists 69

PAGE
Hahnemann, Samuel, biography of..... 98
his chemical law a fallacy..... 146
discovery of the law of similars by..... 99
writings of, Organon and other works..... 99
his theory of chronic diseases..... 129
local remedies denounced by..... 121
his transcendental views upon pathology..... 102
causes of disease immaterial..... 103
disease a nonentity..... 104
his views upon olfaction..... 110
Hahnemannians, pure..... 217
Hali Abbas..... 56
Halle, University of..... 84
Haller's physiology..... 86
Harvey, William..... 80
Helmont, Van..... 84
Hercules..... 26, 31
Herophilus..... 36
High potencies, cure of offensive foot-sweat by..... 108
High potencies tested..... 145
Hippocrates, genealogy of..... 31
opinions and writings of..... 33
theory of disease..... 34
Hippocratic countenance..... 34
period..... 17
History of medicine really begins..... 17
Hoffman, Frederick, his system..... 85, 96
Homœopath, allopath and antipath..... 131
Homœopathic aggravation..... 100
honor and honesty..... 193
law of cure..... 105
practice not based upon pathology, but upon a totality of symptoms..... 133
times, a discussion of homœopathy by a homœopathist..... 188
Homœopathy as taught by Hahnemann..... 97
divisions in..... 98
a huge lie..... 195
in the old world..... 214
quinine and intermittents in..... 186
Horner..... 27
Horus..... 23
Hospital, first public, in the world..... 55
Homœopathic, on Ward's Island..... 193
Hufeland's Journal..... 101
Humoral pathology..... 85, 86
Hunter, William..... 86

Ignorance and superstition of early Christians..... 51
Illinois Homœopathic Medical Association; ventilation of the principles of the school by its own members; angry dis-

PAGE
cussion; refusal to indorse its own fundamental principles 160–167
Improvements in physiology 83
Inconsistencies between homœopathic teachings and practice 185, 192
Infallibility of Galen 48
Infectious diseases combined in same patient 203
International Hahnemannian Association 216

Jena 83
Jews opposed to practical anatomy 75
Julian, Emperor 59
Justinian, reign of 53

Kepler 72
Key-notes in homœopathy 181
Kidd's Laws of Therapeutics, quotations from 198, 199
Knowledge of anatomy by the ancients 73

Law of similars 132
a Divine revelation to Hahnemann 136
modus operandi by which diseases are cured by it 137
Liberal homœopathists 215
Local remedies denounced by Hahnemann 121
Lucius Verus 49
Ludlam, Prof., after-treatment of ovariotomy, quinine and morphine, by 190
antipathy and homœopathy of 192

Machoan, son of Æsculapius 27
Marcus Artorius 40
Aurelius 49
Marsh, Professor, investigations in archæology 20
Materia medica of the ancients 91
Mathematical school of medicine 71
demonstration of the folly of dilutions 149
Medical investigator 161, 185
counsellor 128
Advance, quotations from 185, 186, 188
Medical Press and Circular 195
Medicinal potency 137
Medicine and philosophy 90
Medicines as chemical and mechanical agents 206, 213
as forces 153
absorbed into circulation 154
Mental impressions 53
Meteorology of diseases 33
Methodic school 39, 74, 96
Miasms 129
syphilis, sycosis and psora 122

PAGE
Microscopical and chemical examinations of high potencies... 145
Milwaukee Academy..... 172
Modus operandi of medicines..... 153
Mondini..... 61, 76
Monks, schools established by..... 60
Moors..... 61
Monte Cassino, school at..... 60
Myrepsus..... 95
Mythological age in medicine..... 17

Natural diseases essentially dissimilar 204
Nestorius and the Nestorians..... 54
New England Medical Gazette..... 146
Newton..... 72
New York Homœopathic Medical Society; difference of opinion; resolutions of 1878, '79 and '80; efforts to harmonize an unharmonious convention; resolutions adopted by a two-thirds majority..... 166–172
New York Medical Gazette; homœopathic chicanery in the management of the hospital upon Ward's Island..... 193
Nostrums in ancient Greece 30

Olfaction, medicine by..... 110
Opinions of Galen..... 47
Hippocrates 32
Organon..... 99
Oribasius 59
Origin of medicine, belief in the gods 18, 23
Osiris..... 23
Ovariotomy, homœopathic after-treatment in..... 190

Padua 79, 81
Pagan philosophers, expulsion from Athens..... 53
Paisley, Doctor..... 86
Paracelsus 63
Paten, Guy..... 68
Pathology..... 179
Paulus Ægineta..... 59
Pelops 44
Pergamus 43
Physician, when first used..... 60
Physiology, improvements in, during 17th and 18th centuries 83
Plagues and pestilences 19
Plato 35
Pneumatic school or sect..... 41
Podalirius, son of Æsculapius..... 26, 27
Polybus..... 35
Potencies 178
high, tested, microscopically and chemically..... 145
Potency, medicinal 137
Potentiating..... 107

PAGE
Practical anatomy revived by Mondini..... 61
Praxagoras..... 35
Prayer, diseases cured by..... 61
Prehistoric nations, cannibalism and human sacrifices..... 74
man..... 19
Priesthood..... 51
Principles of dogmatic school..... 35
empiric school..... 38
methodic school..... 40
Printing invented..... 62
Progress of medicine in Western Europe..... 58
of medicine in 13th, 14th and 15th centuries..... 61
of surgery..... 73
Provings..... 100, 139, 182
of calcarea..... 141
Psora..... 123, 130
Pyrrho..... 37
Pythagoras and his school..... 28

Rapou, M., his opinions of the doctrines of homœopathy..... 159
Rational age in medicine..... 18
Religious belief of the ancients opposed to dissection of the human body..... 75
Report of Trustees of the Ohio Blind Asylum..... 188
homœopathic drug-bill in connection therewith..... 189
Restorative plan of treatment..... 212
Revival of practical anatomy..... 76
Rhazes..... 56, 93
Riolan, John..... 68
Roman empire..... 53
destruction of..... 58
Roman law forbidding dissections..... 76
Rosenkrenz, Father..... 69
Rosicrucians..... 69
Rosy Cross..... 69
Rufus the Ephesian..... 41, 76

Sacramento Hospital, drugs and homœopaths..... 190
Salerno, school at..... 60
Satyrus..... 43
Sennertus, Daniel..... 69
Serapis..... 23
Servetus, Michael..... 79
history and death of..... 80
Sherman's test of the 30th dilution..... 172
final report thereon..... 175, 178
Similar and dissimilar diseases united in same patient..... 202
Similia similibus curantur..... 100, 101, 105, 107, 198–212
a piece of folly..... 148
Single remedy and interval between doses..... 112–118

PAGE
Soranus 41
Spain, schools of 56, 61
Specific school 159
Spirit-like pathology 102
dynamic vital force 144
Spirits, vital, animal and natural 46
Stahl, George Ernest 83
Stephanus of Byzantium 40
Sugar introduced by the Arabians 57
Sulphur, remarkable views of Hahnemann upon 118
Surgeon-general's office 49
Sylvius 77
Symptoms, totality of being removed cancels the internal disease 135

Temperature of body, effect of drugs upon 156
Themison 40
Theophrastus 35, 92
works of 92
Theosophy 60
Theriac 94
Thessalus 35
Thessalus Trallianus 41
Thoth 23
Tinctures introduced by the Arabians 57
Tonic treatment 112
Totality of symptoms 104, 133, 135, 157, 200
removed, the disease will be canceled ... 119
Transcendental pathology 102
Triturations 109
mode of preparing 109
strength of 110
Troy, siege of 27

Unity of force 125
University of Cordova 56

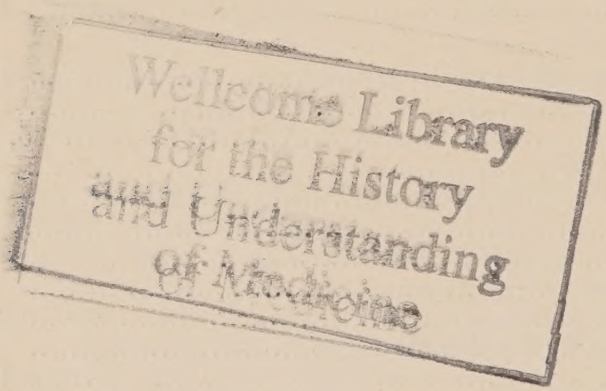
Venesection, how learned 25
Vesalius, Andrew, his biography, travels, misfortunes and death 77–79
Vis medicatrix naturæ 87
denounced by Hahnemann 119
Vital force in disease 125

War of the Rebellion, profession in 49
Ward's Island Homœopathic Hospital 193
Wesselhœft, C., on the divisibility of metals 146
Western Academy of Medicine 186
Witchcraft 71

PAGE
Writings of the empirics..... 37
Galen..... 45–47
Hippocrates..... 31
Paracelsus..... 67
Hahnemann..... 99

Yellow fever in the South; noble conduct of the profession... 50

Zante..... 79
Zurich..... 63


Wellcome Library
for the History
and Understanding
of Medicine

SELECT LIST OF BOOKS

FROM THE CATALOGUE OF

MR. PRESLEY BLAKISTON,

1012 Walnut Street, Philadelphia,

FOR GENERAL AND SCIENTIFIC READERS.

☞ *Any of the following books will be sent, postpaid, upon receipt of the price, or they will be found in the stock of most booksellers throughout the United States and Canada.*

HEALTH AND HEALTHY HOMES. A Guide to Personal and Domestic Hygiene. By George Wilson, M.A., M.D., Medical Officer of Health. Edited by Jos. G. Richardson, Professor of Hygiene at the University of Pennsylvania. 12mo. Cloth. 314 pp. Price $1.50.

CONTENTS.

CHAP.		PAGE.	CHAP.		PAGE
I.	Introductory.	17	VI.	Exercise, Recreation and Training,	187
II.	The Human Body,	33	VII.	Home and Its Surroundings, Drainage, Warming, etc.,	221
III.	Causes of Disease,	66	VIII.	Infectious Diseases and their Prevention,	269
IV.	Food and Diet,	119			
V.	Cleanliness and Clothing,	169			

NOTICES OF THE PRESS.

"A most useful and in every way acceptable book is that published by Presley Blakiston, of Philadelphia, entitled 'Health and Healthy Homes; a Guide to Domestic Hygiene, by George Wilson, M.A., M.D., with Notes and Additions by J. G. Richardson, M.D.' We can speak of the work of Dr. Wilson as one of great merit and utility. It is just such a work, in fact, as one would have expected from the author of the 'Handbook of Hygiene and Sanitary Science,' which has reached its fourth edition. Dr. Wilson is a Medical Officer of Health. He speaks, therefore, as a medical man of large and special experience, and the style and structure of the book now before us reveal the accomplished scholar, as well as the literary adept. In the introductory chapter, in which Addison's 'Vision of Mirza' is turned to excellent account, the author, by a skillful appeal to vital statistics, shows how vast is the amount of preventable disease and suffering. Having had a good foundation, and having proved that we are, much more than we believe we are, the custodians of our own lives and of our own health, he proceeds in a series of chapters to explain the structure of the human body and the physiology and functions of various organs, supplying all the information which is necessary to enable us to understand those intricate processes which constitute the 'miracle of life.'"—*New York Herald.*

HYGIENE AND SANITARY SCIENCE. A Complete Handbook, 4th revised edition. Containing chapters on Public Health, Food, Air, Ventilation and Warming, Water, Water Analysis, Dwellings, Hospitals, Removal, Purification, Utilization of Sewage and Effects on Public Health, Drainage, Epidemics, Duties of Medical Officers of Health, etc. By Geo. Wilson, M.A., M.D. 12mo. Cloth. Price $2.75.

"A sound book, by a very competent writer."—*London Lancet.*

EYESIGHT, GOOD AND BAD. The Preservation of Vision. By Robert Brudenel Carter, M.D., F.R.C.S. With many explanatory illustrations. 12mo. Cloth. Price $1.50.

PREFACE.

A large portion of the time of every ophthalmic surgeon is occupied, day after day, in repeating to successive patients precepts and injunctions which ought to be universally known and understood. The following pages contain an endeavor to make these precepts and injunctions, and the reasons for them, plainly intelligible to those who are most concerned in their observance.

"The publications for popular use, as well as those for professional medical men and surgeons, which Mr. Presley Blakiston issues from his new establishment, 1012 Walnut street, have already won him distinction in his line. One of the latest is his edition of Professor Robert Brudenel Carter's excellent volume called "Eyesight, Good and Bad; a Treatise on the Exercise and Preservation of Vision." It makes a book of 270 pages, distributed through which are many illustrations. The nature of that most delicate organ, the eye, on which so much of the happiness of life depends, is described, along with the weaknesses it may inherit, the dangers it may be exposed to and the diseases to which it is liable as time advances. Most excellent advice for preserving it when healthy and treating it when it is impaired is given by the distinguished author, along with directions concerning the proper glasses that may be needed. The various phenomena of color, as they affect the eyes and the vision, are described in a way that will interest all readers, and the remarks relative to the treatment of the eyes of children will be found most valuable to parents, who often find fault with little ones and their vision, when they themselves are really at fault for neglecting the eyes of the little ones."—*Philadelphia Bulletin.*

WHAT TO DO FIRST in Accidents and Poisoning. By Charles W. Dulles, M.D. Illustrated. 16mo. Cloth. Price 50 cents.

PREFACE.

Whoever has seen how invaluable, in the presence of an accident, is the man or woman with a cool head, a steady hand, and some knowledge of what is best to be done, will not fail to appreciate the desirability of possessing these qualifications. To have them in an emergency one must acquire them before it arises, and it is with the hope of aiding any who wish to prepare themselves for such demands upon their own resources that the following suggestions have been put together.

ON HEADACHES. Their Causes and Cure. By Henry G. Wright, M.D. Ninth thousand. 16mo. Cloth. Price 50 cents.

ON DEAFNESS, GIDDINESS and Noises in the Head. By Ed. Woakes, M.D. Illustrated. 2d edition. 12mo. Cloth. Price $2.50.

THE MANAGEMENT OF CHILDREN in Health and Disease. By Mrs. Amie M. Hale, M.D. A book for mothers. 12mo. Cloth. Price 50 cents.

WHAT THE LEADING DAILY PAPER OF PHILADELPHIA SAYS OF IT.

"No better book than this, on the management of children, is to be had in such a small compass and convenient form. The chapters on 'Food and Sleep,' 'How shall Children be Dressed,' on 'Infant Digestion and Diet,' are all valuable. Those on indigestion, especially, will give some new ideas to mothers who are accustomed to nurse their children whenever they cry, thus often giving them still more to cry about, in the way of overloaded stomachs. One subject, in particular, should be studied, as an article of religious faith, by all delicate mothers who have given their children weak lungs and tender throats to go through life with, or when babies get their consumptive tendencies from the father's side. The ounce of precaution in childhood goes further than many pounds of medicine or years of care thereafter. All scrofulous children, whether showing symptoms of lung troubles or other, should be taken in hand at once, and what is called a prophylactic treatment applied. In other words, give what food or medicines are needed to overcome these *tendencies;* do not wait until these break out, in after years, into decided symptoms. Children can learn to take cod-liver oil—if not to cry for it, at least to like it—and by taking all these agents, milk and the strengthening oils, that supply what the parents have not given by way of outfit, tone and health to the system, many a weak and apparently fore-doomed child has outgrown its dreadful inheritance and lived to a healthy old age. Begin with the children. For other and the sudden diseases of childhood, Dr. Hale's book gives wise and encouraging advice. Altogether, it is a book which ought to be put into every baby basket, even if some lace-trimmed finery is left out, and should certainly stand on every nursery bureau."—*The Philadelphia Ledger.*

BIBLE HYGIENE; or, Health Hints. By a Physician. This book has been written, first, to impart in a popular and condensed form the elements of hygiene. Second, to show how varied and important are the Health Hints contained in the Bible, and third, to prove that the secondary trendings of modern philosophy run in a parallel direction with the primary light of the Bible. 12mo. Cloth. Price $1.25.

NOTICES OF THE PRESS.

"The anonymous English author of this volume has written a decidedly readable and wholesome book. Its style is so pleasant that it may be read with profit by those not specially familiar with Bible interpretation, or with the 'regimen of health,' as Bacon called it."—*Philadelphia Press.*

"The scientific treatment of the subject is quite abreast of the present day, and is so clear and free from unnecessary technicalities that readers of all classes may peruse it with satisfaction and advantage."—*Edinburgh Medical Journal.*

BRIGHT'S DISEASE. How Persons Affected with this Disease Ought to Live. By J. F. Edwards, M.D. 32mo, 96 pages. Cloth. Price 50 cents.

The author gives, in a readable manner, those instructions in relation to hygiene, clothing, eating, bathing, etc., etc., which, when carried out, will prolong the life of those suffering from this disease, and a neglect of which costs annually many lives.

THE AMERICAN HEALTH PRIMERS. Edited by W. W. Keen, M.D. Bound in Cloth. Price 50 cents each.

The twelve volumes, in Handsome Cloth Box, $6.00.

I. Hearing and How to Keep It. With illustrations. By Chas. H. Burnett, M.D., of Philadelphia, Aurist to the Presbyterian Hospital, etc.

II. Long Life, and How to Reach It. By J. G. Richardson, M.D., of Philadelphia, Professor of Hygiene in the University of Pennsylvania.

III. The Summer and Its Diseases. By James C. Wilson, M.D., of Philadelphia, Lecturer on Physical Diagnosis in Jefferson Medical College.

IV. Eyesight, and How to Care for It. With Illustrations. By George C. Harlan, M.D., of Philadelphia, Surgeon to the Wills (Eye) Hospital.

V. The Throat and the Voice. With illustrations. By J. Solis Cohen, M.D., of Philadelphia, Lecturer on Diseases of the Throat in Jefferson Medical College, etc.

VI. The Winter and Its Dangers. By Hamilton Osgood, M.D., of Boston, Editorial Staff Boston *Medical and Surgical Journal.*

VII. The Mouth and the Teeth. With illustrations. By J. W. White, M.D., D.D.S., of Philadelphia, Editor of the *Dental Cosmos.*

VIII. Brain Work and Overwork. By H. C. Wood, Jr., M.D., of Philadelphia, Clinical Professor of Nervous Diseases in the University of Pennsylvania, etc.

IX. Our Homes. With illustrations. By Henry Hartshorne, M.D., of Philadelphia, formerly Professor of Hygiene in the University of Pennsylvania.

X. The Skin in Health and Disease. By L. D. Bulkley, M.D., of New York, Physician to the Skin Department of the Demilt Dispensary and of the New York Hospital.

XI. Sea Air and Sea Bathing. By John H. Packard, M.D., of Philadelphia, Surgeon to the Episcopal Hospital.

XII. School and Industrial Hygiene. By D. F. Lincoln, M.D., of Boston, Mass., Chairman Department of Health, American Social Science Association.

This series of American Health Primers is prepared to diffuse as widely, and cheaply as possible, among all classes, a knowledge of the elementary facts of Preventive Medicine, and the bearings and applications of the latest and best researches in every branch of Medical and Hygienic Science. They are not intended (save incidentally) to assist in curing disease, but to teach people how to take care of themselves, their children, pupils, employés, etc.

They are written from an American standpoint, with especial reference to our Climate, Sanitary Legislation and Modes of Life; and in these respects we differ materially from other nations.

The subjects selected are of vital and practical importance in every-day life and are treated in as popular a style as is consistent with their nature. Each volume, if the subject calls for it, is fully illustrated, so that the text

may be clearly and readily understood by any one heretofore entirely ignorant of the structure and functions of the body. The object being to furnish the general or unscientific reader, in a compact form and at a low price, reliable guides for the prevention of disease and the preservation of both body and mind in a healthy state.

The authors have been selected with great care, and on account of special fitness, each for his subject, by reason of its previous careful study, either privately or as public teachers.

NOTICES OF THE PRESS.

"As each little volume of this series has reached our hands we have found each in turn practical and well-written."—*New York School Journal.*

"This is volume No. 5 of the 'American Health Primers,' each of which *The Inter-Ocean* has had the pleasure to commend. In their practical teachings, learning, and sound sense, these volumes are worthy of all the compliments they have received. They teach what every man and woman should know, and yet what nine-tenths of the intelligent class are ignorant of, or at best, have but a smattering knowledge of."—*Chicago Inter-Ocean.*

"The series of American Health Primers, edited by Dr. Keen, of Philadelphia, and published by Presley Blakiston, deserves hearty commendation. These handbooks of practical suggestion are prepared by men whose professional competence is beyond question, and, for the most part, by those who have made the subject treated the specific study of their lives. Such was the little manual on 'Hearing,' compiled by a well-known aurist, and we now have a companion treatise, in *Eyesight and How to Care for It*, by Dr. George C. Harlan, surgeon to the Wills Eye Hospital. The author has contrived to make his theme intelligible and even interesting to the young by a judicious avoidance of technical language, and the occasional introduction of historical allusion. His simple and felicitous method of handling a difficult subject is conspicuous in the discussion of the diverse optical defects, both congenital and acquired, and of those injuries and diseases by which the eyesight may be impaired or lost. We are of the opinion that this little work will prove of special utility to parents and all persons intrusted with the care of the eyes."—*New York Sun.*

"The series of American Health Primers, now in course of publication, is presenting a large body of sound advice on various subjects, in a form which is at once attractive and serviceable. The several writers seem to hit the happy mean between the too technical and the too popular. They advise in a general way, without talking in such a manner as to make their readers begin to feel their own pulses, or to tinker their bodies without medical advice."—*Sunday-school Times.*

"*Brain Work and Overwork.* By Dr. H. C. Wood, Clinical Professor of Nervous diseases in the University of Pennsylvania. This is another volume of the admirable "Health Primers," published by Presley Blakiston. To city people this will prove the most valuable work of the series. It gives, in a condensed and practical form, just that information which is of such vital importance to sedentary men. It treats the whole subject of brain work and overwork, of rest, and recreation, and exercise in a plain and practical way, and yet with the authority of thorough and scientific knowledge. No man who values his health and his working power should fail to supply himself with this valuable little book."—*State Gazette, Trenton, N. J.*

ON SLIGHT AILMENTS. Their Nature and Treatment. By Lionel S. Beale, M.D. Large 12mo. Cloth. Price $1.75.

Among civilized nations a perfectly healthy individual seems to be the exception rather than the rule; almost every one has experienced very frequent departures, of one kind or another, from the healthy state; in most instances these derangements are slight, though perhaps showing very grave symptoms, needing a plain but quick remedy.

CONDENSATION OF CONTENTS.

The Tongue in Health and Slight Ailments, Appetite, Nausea, Thirst, Hunger, Indigestion, its Nature and Treatment, Dyspepsia, Constipation, and its Treatment, Diarrhœa, Vertigo, Giddiness, Biliousness, Sick Headache, Neuralgia, Rheumatism, on the Feverish and Inflammatory State, the Changes in Fever and Inflammation, Common Forms of Slight Inflammation, Nervousness, Wakefulness, Restlessness, etc., etc.

OTHER BOOKS BY DR. LIONEL S. BEALE, F.R.S., F.R.C.P.

DISEASE GERMS. Their Real and Supposed Nature and their Destruction. 2d edition, 117 illustrations. 12mo. Cloth. Price $4.00.

BIOPLASM. A Contribution to the Physiology of Life. Illustrated. 12mo. Cloth. Price $2.25.

PROTOPLASM. Or Matter and Life. 3d edition. 16 Colored Plates. 12mo. Cloth. Price $3.00.

THE MICROSCOPE. How to Work with It. A Complete Manual of Microscopical Manipulation. 400 Illustrations. 8vo. Cloth. Price $7.50.

THE MICROSCOPE IN PRACTICAL MEDICINE. With full directions for examining, preparing and injecting objects, the various secretions, etc. By Lionel S. Beale, M.D. 4th edition. 500 illustrations. 8vo. Cloth. Price $7.50.

WATER ANALYSIS For Sanitary Purposes, with Hints for the Interpretation of Results. By E. Frankland, PH.D, D.C.L. Illustrated. 12mo. Cloth. Price $1.00.

"Mr. Presley Blakiston has reprinted Dr. E. Frankland's excellent little manual of *Water Analysis for Sanitary Purposes*, which in the compass of 150 pages gives clear directions for the best methods of analysis, and for the interpretation of the results. The name of the author is a sufficient testimonial to its accuracy and its practical value."—*Boston Journal of Chemistry.*

BY THE SAME AUTHOR.

HOW TO TEACH CHEMISTRY. Being Six Lectures to Science Teachers. Illustrated. 12mo. Cloth. Price $1.25.

THE ART OF PERFUMERY. The Methods of Obtaining the Odors of Plants and Instruction for the Manufacture of Perfumery, Dentifrices, Soap, etc. etc. By G. W. Septimus Piesse. 4th edition enlarged. 366 illustrations. 8vo. Cloth. Price $5.50.

WORKS ON HYGIENE, CLIMATE, ETC.

SANITARY EXAMINATION OF WATER, AIR AND Food. By Cornelius B. Fox, M. D. 94 engravings. 12mo. Cloth. Price $4 00.

NUTRITION IN HEALTH AND DISEASE. A Contribution to Hygiene and Medicine. 3d edition. By J. Henry Bennett, M.D. 8vo. Cloth. Price $2.50.

HYGIENE AND CLIMATE in the Treatment of Consumption. 3d edition. By J. Henry Bennett, M.D. 8vo. Cloth. Price $2.50.

PRACTICAL HYGIENE. A Complete Manual for Army and Civil Medical Officers, Boards of Health, Engineers and Sanitarians. 5th edition. With many illustrations. By Ed. A Parkes, M.D. 8vo. Cloth. Price $6.00.

VOCAL HYGIENE AND PHYSIOLOGY. With special reference to the Cultivation and Preservation of the Voice. For Singers and Speakers. With engravings. By Gordon Holmes, M.D. 12mo. Cloth. Price $2.00.

HEALTH RESORTS of Europe, Asia and Africa. The result of the Author's own observations during several years of health travel in many lands. By T. M. Madden, M.D. 8vo. Cloth. Price $2.50.

THE OCEAN AS A HEALTH RESORT. A Handbook of Practical Information as to Sea Voyages. For the Use of Invalids and Tourists. By Wm. S. Wilson, M.D. Illustrated by a chart showing the ocean routes of steamers, and the physical geography of the sea. 8vo. Cloth. Price $2.50.

DWELLING HOUSES and Their Relation to Health. By W. H. Corfield. 12mo. Cloth. *Preparing.*

WORKS ON MICROSCOPY.

HOW TO WORK WITH THE MICROSCOPE. A Complete Manual of Microscopical Manipulation. Containing full descriptions of all new processes of investigation, with directions for examining objects under the highest powers, and for photographing microscopical objects. By Lionel S. Beale, M.D. 5th edition, enlarged and containing over 400 illustrations, many being colored. 8vo. Cloth. Price $7.50.

MICROSCOPIC MOUNTING. A Complete Manual, with notes on the collection and examination of objects. By Jno. H. Martin. 2d edition. With 150 illustrations. 8vo. Cloth. Price $2.75.

SECTION CUTTING. A Practical Guide to the Preparation and Mounting of Sections for the Microscope. By Sylvester Marsh. Illustrated. 16mo. Cloth. Price 75 cents.

EXAMINATION OF DRINKING WATER with the Microscope. By J. G. MacDonald, M.D. With 20 full-page lithographic references, tables, etc. 8vo. Cloth. Price $2.75.

WORKS ON CHEMISTRY.

CHEMISTRY, INORGANIC AND ORGANIC. With Experiments and a Comparison of Equivalent and Molecular Formulæ. 295 Engravings. By C. L. Bloxam. 4th London edition revised. 8vo. Cloth. Price $4.00.

NOTES FOR CHEMICAL STUDENTS. Compiled from Fowne's and Other Manuals. By Albert J. Bernays, PH.D. 6th edition. 16mo. Cloth. Price $1.25.

MEDICAL AND PHARMACEUTICAL CHEMISTRY. Synthetical, Descriptive and Analytical. 2d edition, completely rearranged and revised. By John Muter, M.A., M.D. Royal 8vo. Cloth. Price $6.00.

HANDBOOK OF MODERN CHEMISTRY, Organic and Inorganic. By C. Meymott Tidy, M.D. 8vo. 600 pages. Cloth. Price $5.00.

A PRIMER OF CHEMISTRY. Including Analysis. By Arthur Vacher. 32mo. Cloth. Price 50 cents.

COMMERCIAL ORGANIC ANALYSIS. Being a Treatise on the Properties, Proximate Analytical Examination, and Modes of Assaying the various Organic Chemicals and Preparations employed in the Arts, Manufactures, Medicine, etc.; with Concise Methods for the Detection and Determination of their Impurities, Adulterations, and Products of Decomposition. Vol. I.—Cyanogen Compounds, Alcohols and their Derivatives, Phenols, Acids, etc. 8vo. Cloth. Price $3.50.

MISCELLANEOUS.

ON HOSPITALS AND PAYING WARDS Throughout the World. Facts in Support of a Rearrangement of the System of Medical Relief. By Henry C. Burdett. 8vo. Cloth. Price $2.25.

COTTAGE HOSPITALS; Their Origin, Progress and Management 2d edition, enlarged and illus. By Henry C. Burdett. $4.50

HOSPITAL NURSING. A Manual for all engaged in Nursing the Sick. 12mo. Cloth. Price $1.00.

DEFECTS OF SIGHT AND HEARING; Their Nature, Causes and Prevention. By T. Wharton Jones, F.R.S. 2d edition. 12mo. Cloth. Price 50 cents.

IMPERFECT DIGESTION; Its Causes and Treatment. By Arthur Leared, M.D., F.R.C.P. 6th edition. 12mo. Cloth. Price $1.50.

SEA AIR AND SEA BATHING; Their Influence on Health. A Guide for Visitors at the Seaside. By Chas. Parsons, M.D. 18mo. Cloth. Price 60 cents.

COMPEND OF DOMESTIC MEDICINE, and Companion to the Medicine Chest. By Savory and Moore. Illustrated. 12mo. Cloth. Price 50 cents.

THE TRAINING OF NURSES. Their Efficient Training for Hospital and Private Practice. By Wm. Robert Smith. Illustrated 12mo. Cloth. Price $2.00.